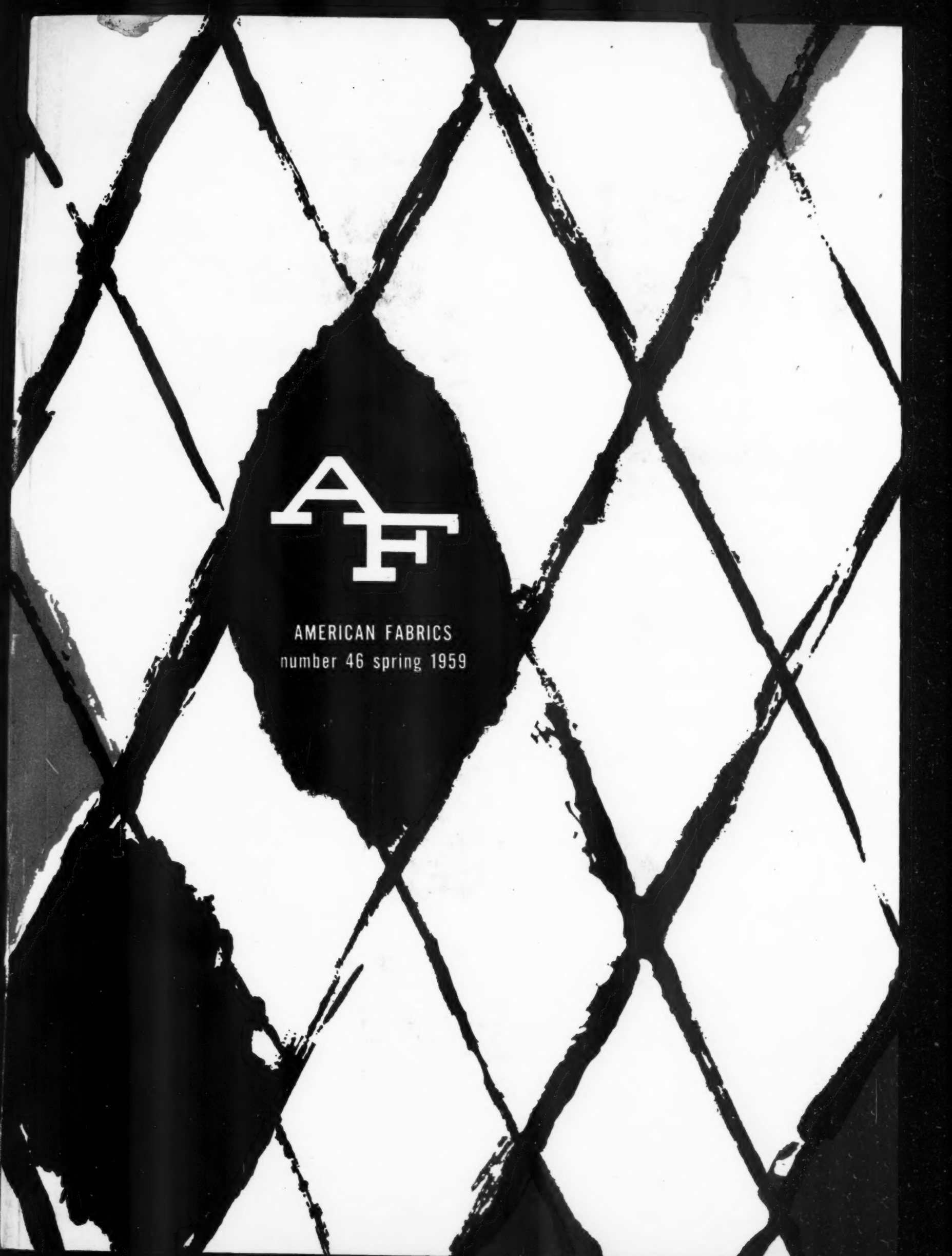

AF

AMERICAN FABRICS

number 46 spring 1959

four times lovelier

(thanks to texturized nylon)

1. softer to touch 2. richer in color 3. shed wrinkles 4. won't go clammy when the weather does. Fancy claims? Not these! They're why-hasn't-it-happened-before *facts*. Because these separates are *texturized nylon*. Texturizing is a process that changes the face of nylon . . . a development that demands only the finest nylon yarn. Today, a good share of that yarn is the product of the only wholly unified plant, the most advanced research facilities, the most exciting name in the industry: The Chemstrand Corporation.

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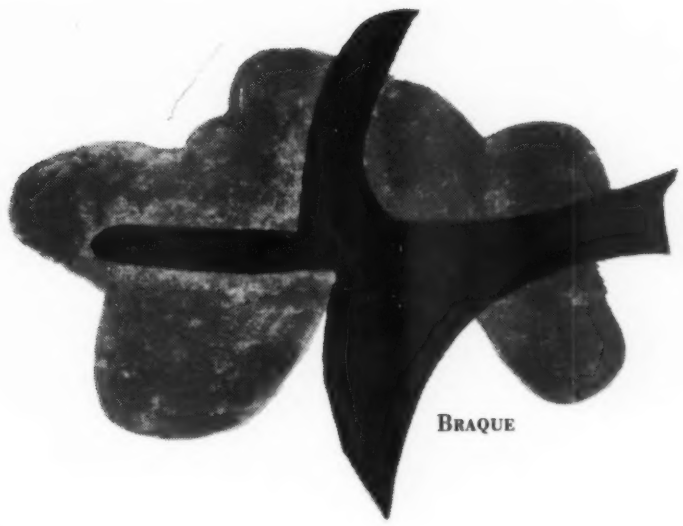
Chemstrand makes only the yarn; America's finest mills and manufacturers do the rest. THE CHEMSTRAND CORPORATION, 350 Fifth Ave., N. Y. 1 • Plants: CHEMSTRAND® NYLON — Pensacola, Fla. • ACRILAN® ACRYLIC FIBER — Decatur, Ala.



BRAQUE

DIRECTIONS

in Fabric Fashion Trends for the Coming Season

This special portfolio brings to American Fabrics subscribers the significant direction, in fabrics and fashions for the coming seasons. Our staff has selected for presentation specific ideas from the vast wealth of fabric ideas, textures, colors and silhouettes which flood the world each season. We have edited and selected those major directions which we are convinced constitute that key to correct merchandising and profitable business for the seasons ahead.

What are the 12 important high fashion colors for the future?

What is the direction in which texture is going?

What categories of blends are of particular significance?

How does the new fashion thinking affect fabric thinking?

The new colors can be used individually or in combination with each other. The high fashion percale print, with *Everglaze* finish, was especially designed by STUDIO K for J. MANES FABRICS.

A. F. COLORS

for Spring and Summer 1960

The most powerful single selling force in fashion today is color.

In this number the editors of American Fabrics bring you

twelve fashion colors for Spring and Summer 1960.

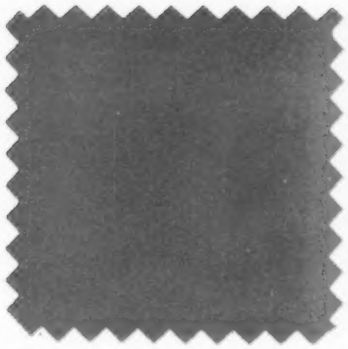
These are the colors which will help sell more goods at a profit.

THE SELECTION and determination as to which colors should be and can successfully be promoted in a new season are not a matter of so-called taste or hunch or intuition on any individual's part. It can be pointed out that, in certain areas, a few individuals have successfully plotted their companies' Color careers with relative success. But beneath the apparent ease with which these men or women put their fingers on certain colors there lies a foundation of many years of experience and, generally, a great deal of fundamental study and research in the right quarters. We wish, however, to point out that they are rare, and that a total industry approaching sales of some ten billion dollars a year cannot afford the luxury of gambling on Color. This one factor possibly causes the greatest single percentage of loss in the textile business; any substantial reduction of these losses will automatically reflect itself in increased earnings for all segments of the textile, apparel and allied industries.

Members of our editorial board have successfully advised some of the world's best known textile companies as to the best directions in which to move when handling colors from year to year. Concern for, and concern with, Color is an integral part of our editorial policy, and this concern is evident in each issue of the magazine. Whenever trends start in fabric fashion, American Fabrics people are constantly there to track and project. Cora Carlyle's charting of colors at seasonal Paris couture openings is a good example of an intense preoccupation with this all-important phase of business activity. It is perhaps our own fault that more people in the industry have not taken fuller advantage of our color guide posts which we have established in issues of American Fabrics. As an instance, refer back to the Fall 1957 cover of Issue #42: the specific shades of green, orange and yellow which made up that cover served to inspire some companies to ready those colors in their own lines for late-1958; in a corollary sense, the multicolor design of Issue #45 was intended as a guide to chemical companies, to yarn makers, to converters and manufacturers and retailers . . . for 1959.

These covers were not blatantly labeled as guideposts to Color. A few individuals recognized them as such, and they were able to capitalize well on the use of this advance information; but, as an outsider put it to us, "Sometimes you have to pound a thumbtack with a sledgehammer." This is precisely what we propose to do for 1960 . . . with the Colors reproduced on the next page. They represent what American Fabrics' Color Council believes will be the most easily-sold colors in the coming year; they are the boiled-down result of much information and much training to track development from an isolated fact into a trend . . . when logic so indicates. They can be used in your merchandise presentation, in your planning and merchandising for the coming year. THE PUBLISHER

GUI MAUVE



VIOLET

BALLET ROSE

YELLOW

EAU DE COLOGNE

PALE BLUE

PEACOCK BLUE

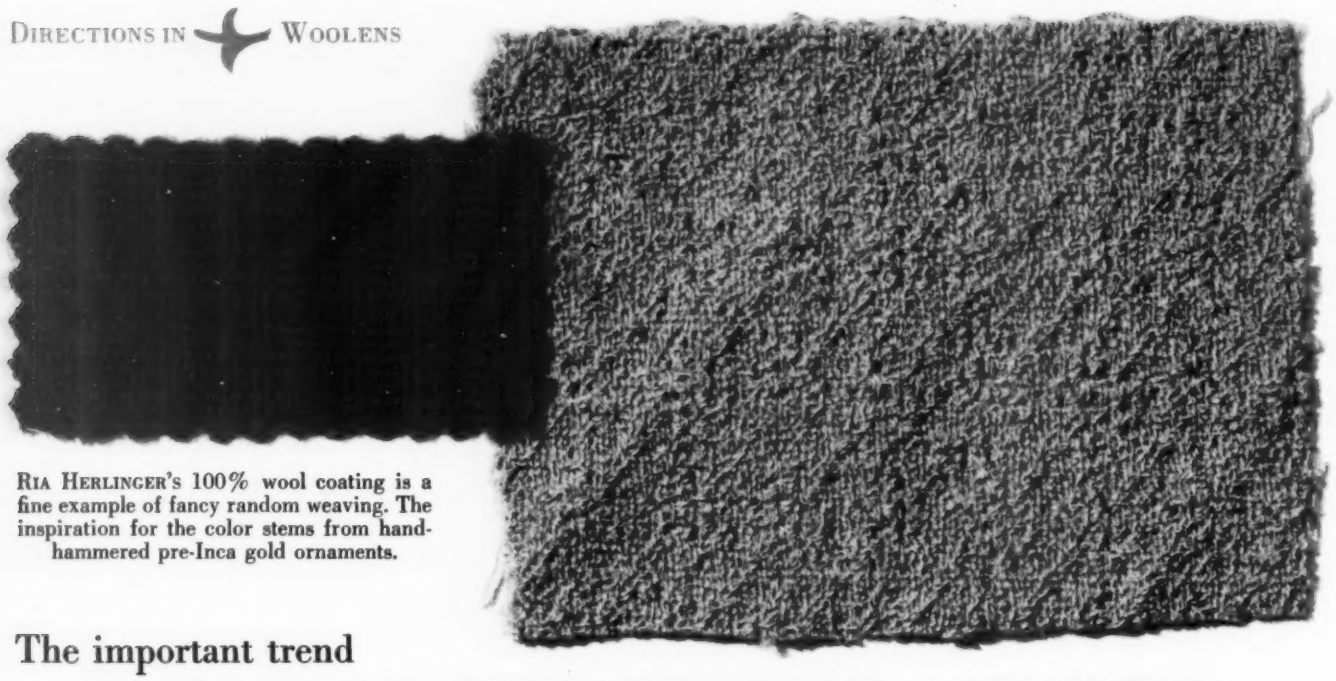
ROYAL NAVY

CORAL

EMERALD GREEN

BLUISH RED

STRINGBEAN GREEN

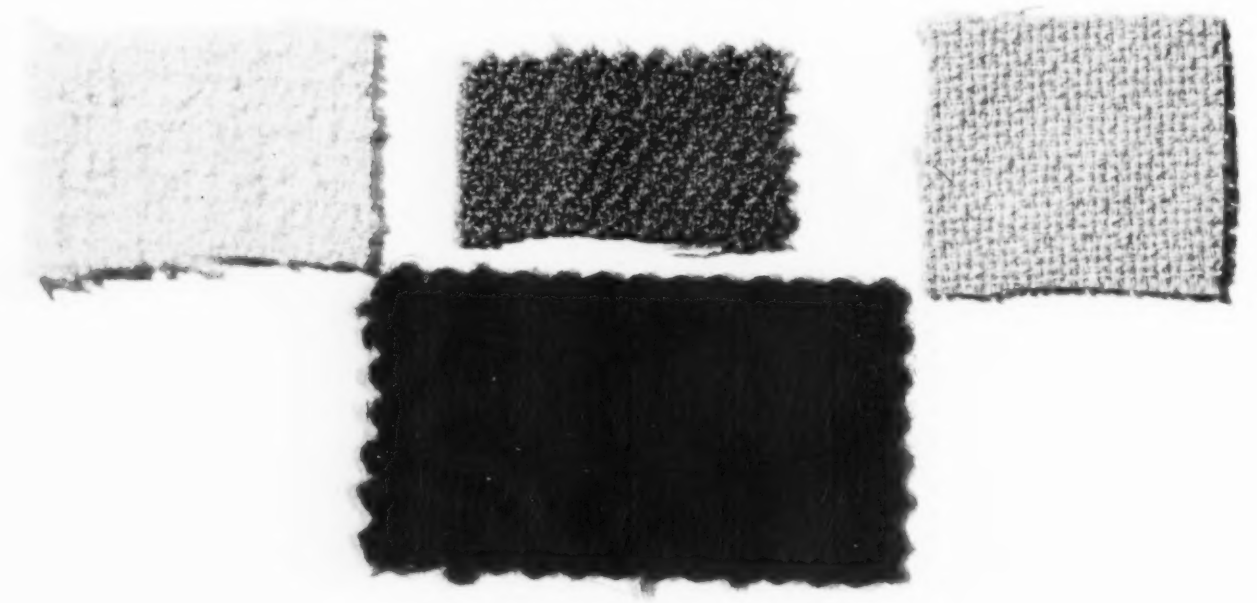


RIA HERLINGER'S 100% wool coating is a fine example of fancy random weaving. The inspiration for the color stems from hand-hammered pre-Inca gold ornaments.

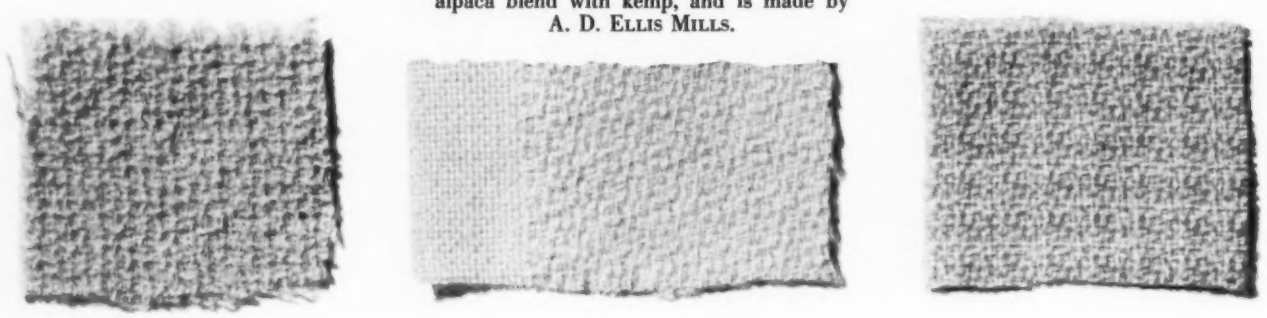
The important trend is toward the FLAT TEXTURED LOOK in WOOLENS

It requires both the hand and the eye, to discern the textured effects which mark the new woolens. Last season, when such obvious and exaggerated textures as the looped-mohairs captured the public fancy, one could tell at a distance that the fabric stressed surface interest; currently, the move (in both weaving and design) is more in the direction of subtlety.

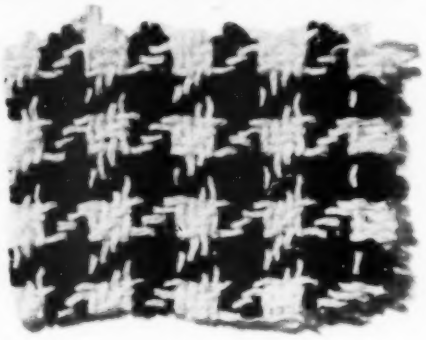
Exit the Hairy, Loopy Look in Favor of Flat Textures...

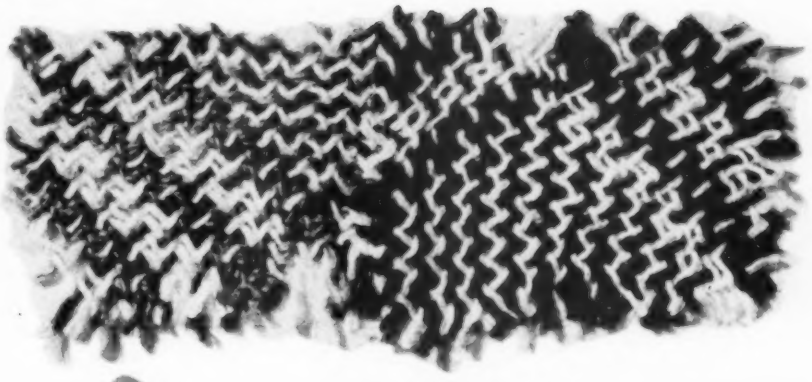


This attractive waffle-weave woven coating highlights the knitted look. It is an unusual alpaca blend with kemp, and is made by A. D. ELLIS MILLS.



Such popular stand-bys as glen plaids, homespuns and rustics will continue to be popular, but they will not shout.



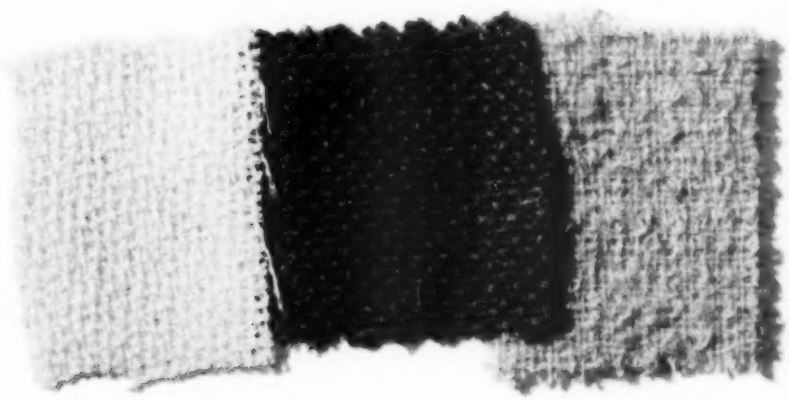


RIVIÉRE CHANEL CARDIN

Left to right: CLAUDE RIVIÉRE's dress and capelet ensemble in a flat-textured Shetland. CHANEL's cardigan-type suit with brass closures in a nubby plaid tweed. CARDIN's cropped jacket suit in pink and lilac shades. Peter Fink photos.

A 100% yarn-dyed wool and worsted ribbon-weave coating by ANGLO FABRICS . . . has the desired flat-textured look to conform to the newest fashion trends.

A luxurious shadow-box plaid of wool, worsted and mohair by HOCKANUM. Note that the flatter surface interest is achieved by restrained usage of loops.



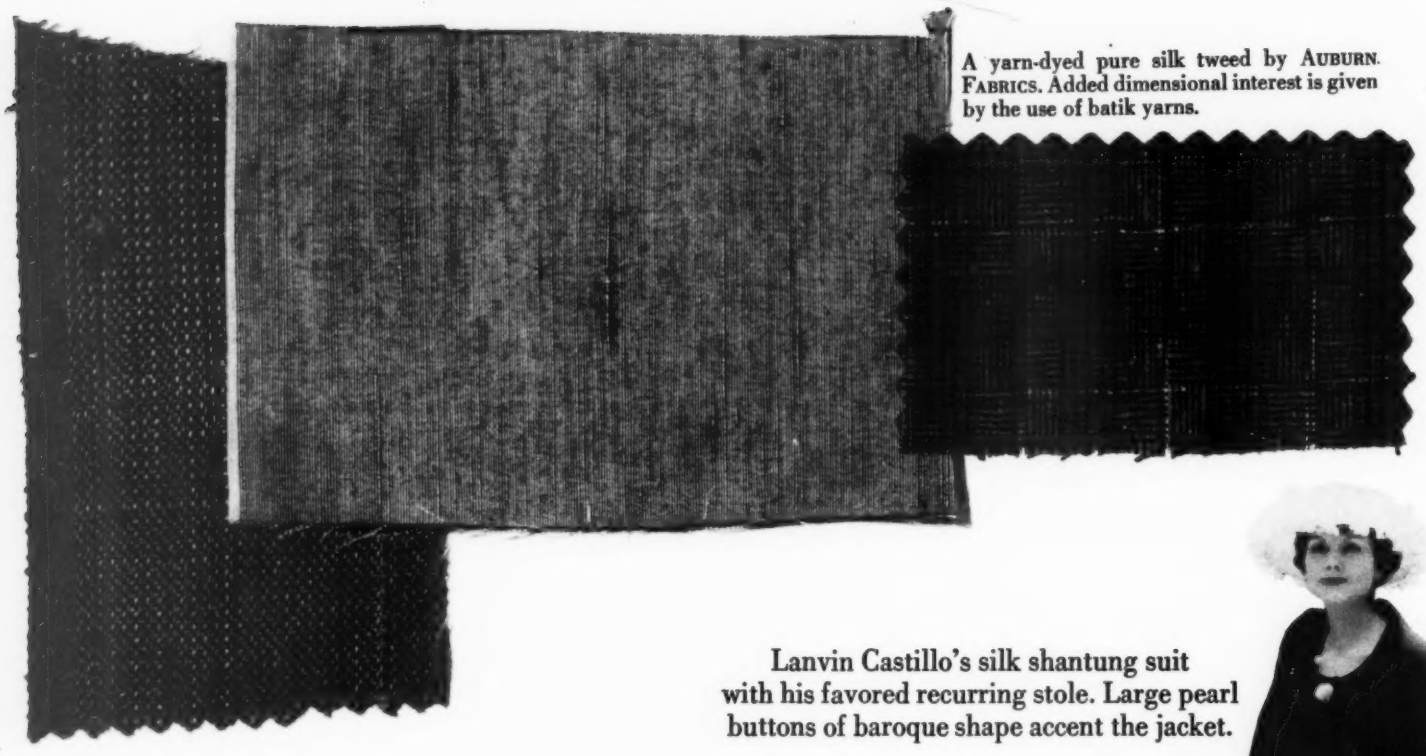
Summarizing Woolens, Watch for:

— *the flat-Textured Weaves*

— *the Lace-Like Weaves in Chainstitch effects similar to Lenos*

— *the Grey Flannels so widely used by the Paris Couture*

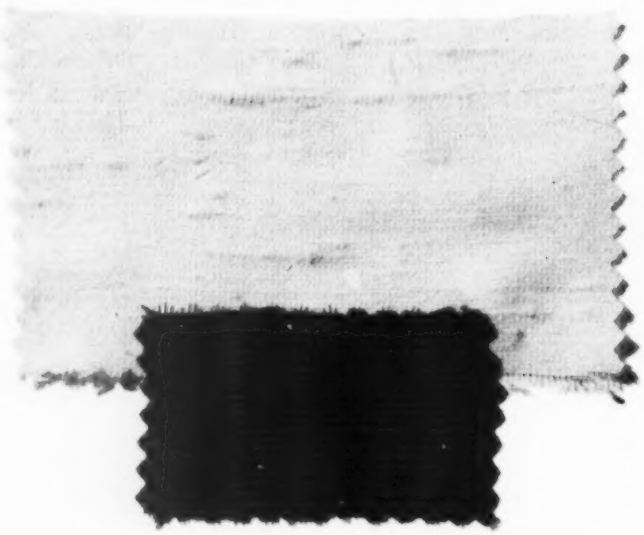
— *Checks, Plaids and Houndstooth Checks in miniature — miniature Proportions, and in colors as well as black-and-white and in odd and unorthodox combinations — for example, checks and plaids together.*



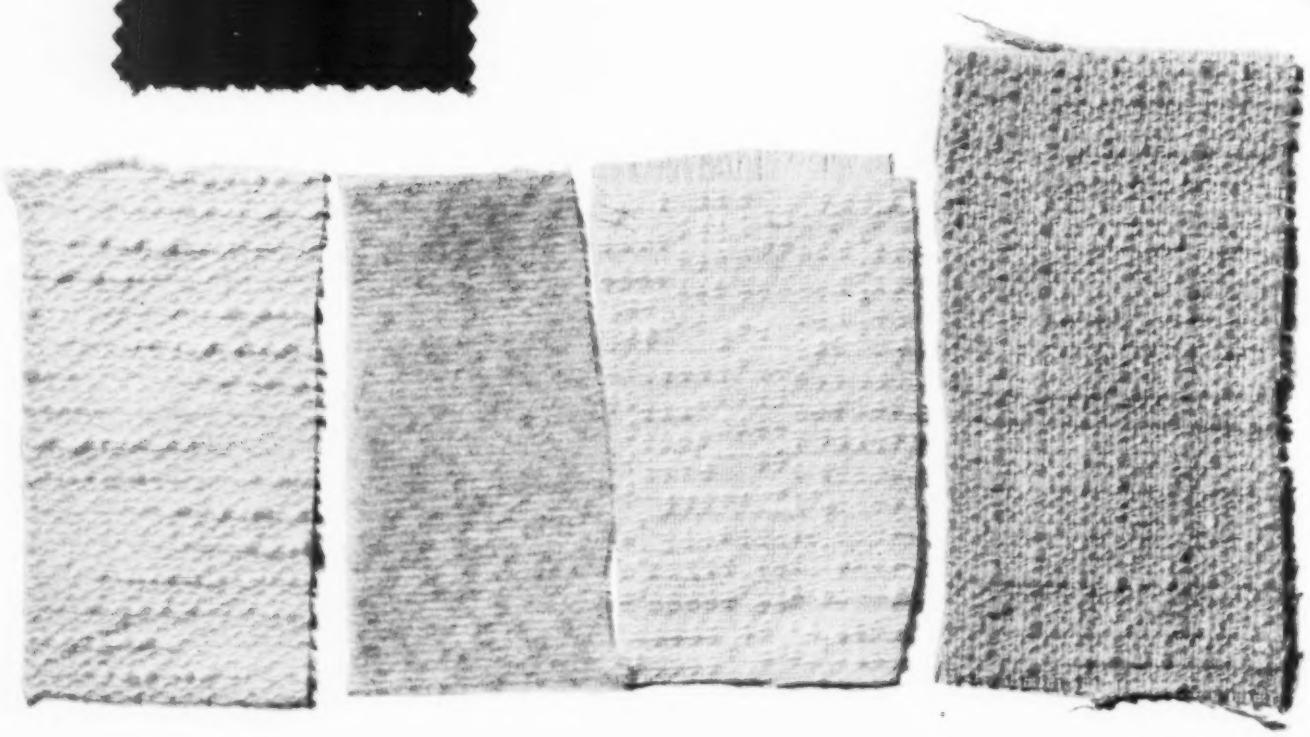
A yarn-dyed pure silk tweed by AUBURN FABRICS. Added dimensional interest is given by the use of batik yarns.

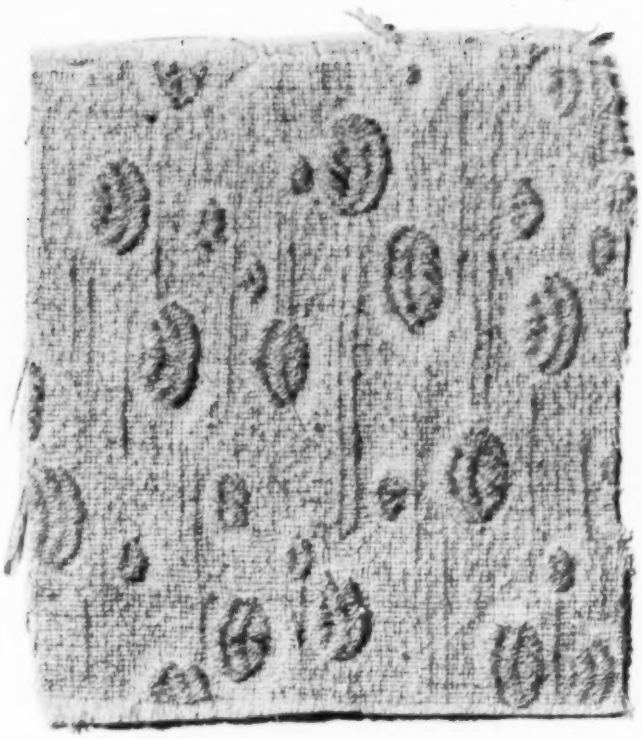
Lanvin Castillo's silk shantung suit with his favored recurring stole. Large pearl buttons of baroque shape accent the jacket.

An important trend is toward SILKS, RAYONS, and BLENDS with SLUBS



This tendency reflects the consumer interest in surface texture. The Textured Shantung Look is in both plain and fancy weaves . . . indicates a very wide future use of slub yarns. Even when no slub yarns are used, mills will strive to achieve the effect of slubbed fabrics through dobby or hook weaving.





Summarizing Silks, Rayons in blends, watch for:

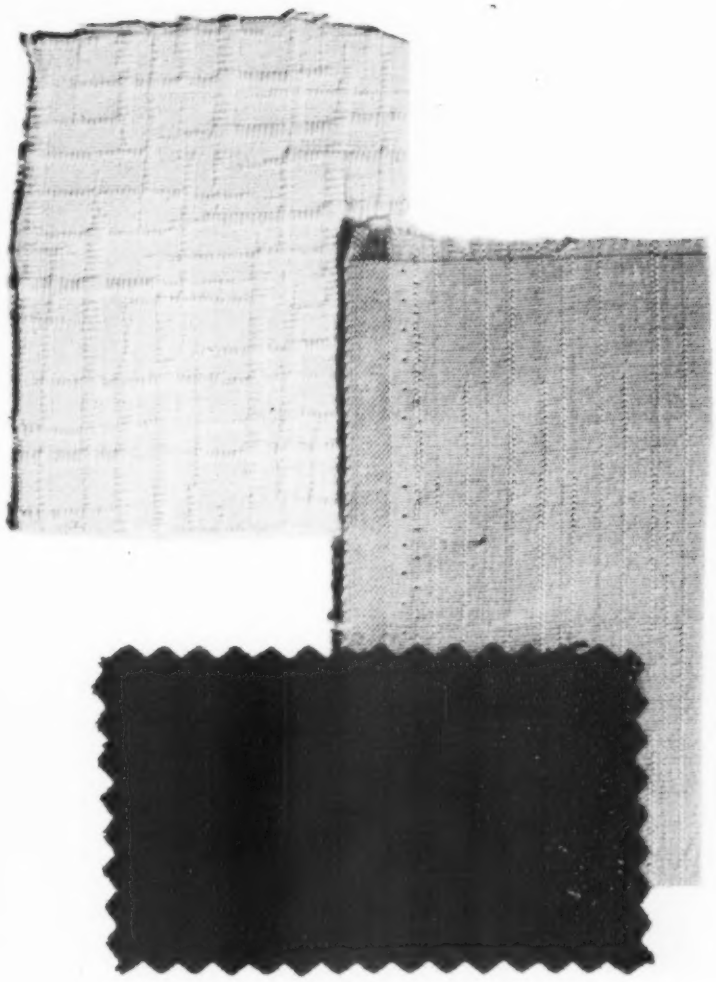
— *the slubbed yarn look*

— *the nubby textures*

— *the use of yarns that give voluminous "cloque" effects*

— *the growing interest in blends of all kinds*

— *the revival of twill and surah type fabric (the surah silk shown at lower right is the "Mille Feuilles" design)*



The sample swatched above is COHAMA's rayon and silk which features the slubbed yarn fashion look.

PATOU's black and white polka dot nylon and silk twill

DIRECTIONS IN SLUBS

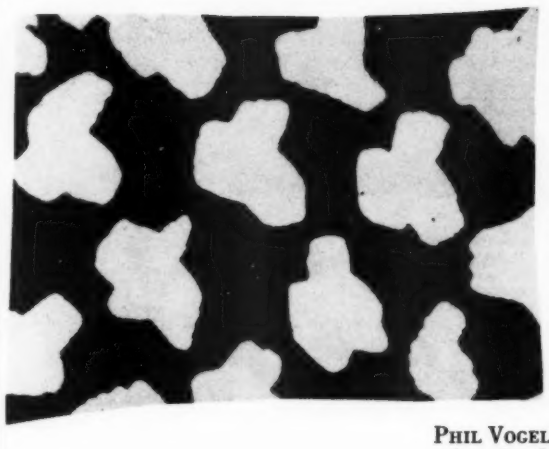
A trend for semi-geometrical designs. Note that ordinary squares and other standard motifs are used in a manner which makes them more interesting and appealing than ever before.

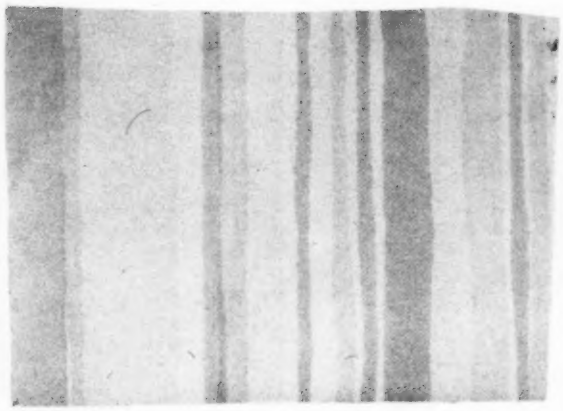
An important trend is toward

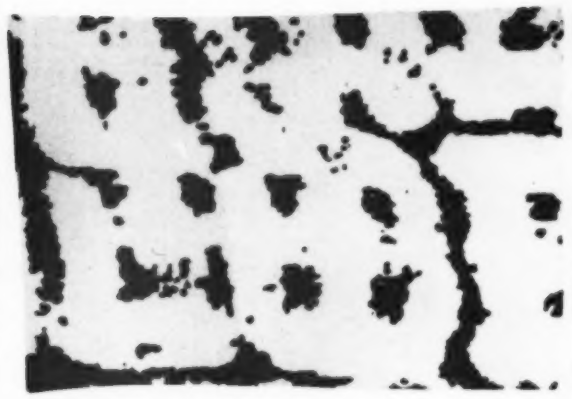
MONOCHROMES and SEMI-GEOMETRIC or Random PRINTS

As reported in the previous issue of American Fabrics, the use of monochromes or several tones of one and the same color in prints is gaining strong favor. All lines showed several of these print ideas.

Another upcoming movement is in the choice of asymmetric rather than strictly measured patterns. This demands a free balance by eye and *weight* rather than measure. This gives the textile designer greater latitude in the creation of free-flowing designs which still present a semblance of order at a distance.







PHIL VOGELMAN, master designer of fine fabrics, creates this group of special Onondaga random prints in the artfully-artless manner. Pure silk, of course, is favored by Mr. Vogelman.

Watch For: Random geometrics favored over mechanically-drawn design.

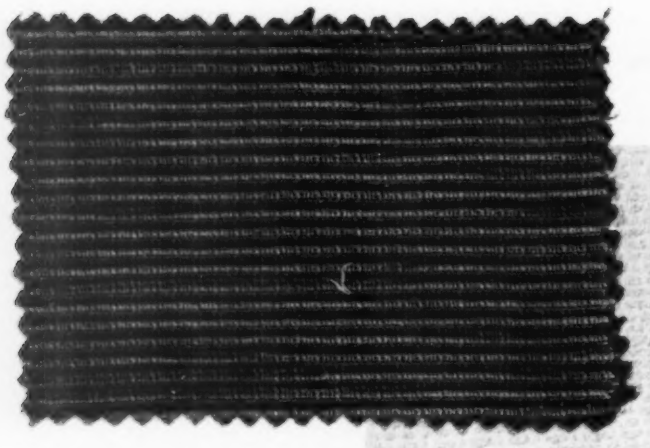
— *Tone on Tone (see below)*

— *Flowers — of course — but there begins to be rumblings against the overuse of Impressionist designs.*

— *Prints with touches of white.*

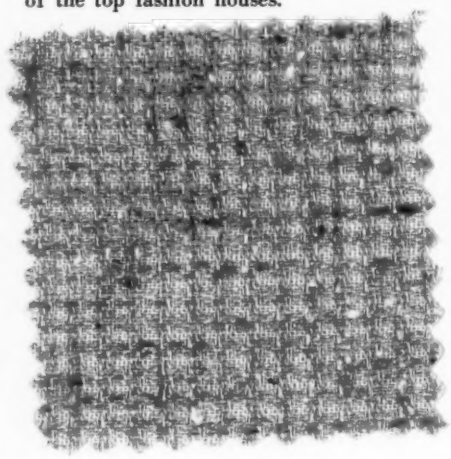
Always a favorite — the warp-print taffeta with large chrysanthemum motifs. Christian Dior.

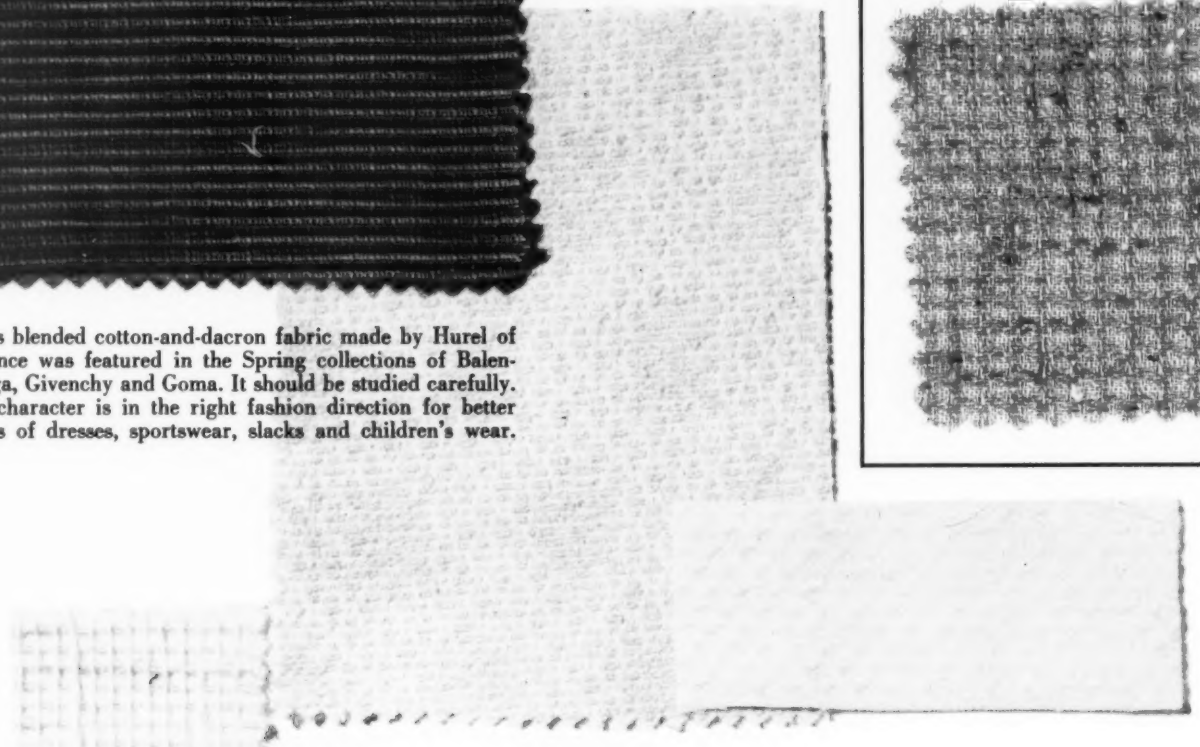
Lanvin-Castillo's beautiful evening ensemble with the lovely white borders.



This blended cotton-and-dacron fabric made by Hurel of France was featured in the Spring collections of Balenciaga, Givenchy and Goma. It should be studied carefully. Its character is in the right fashion direction for better lines of dresses, sportswear, slacks and children's wear.

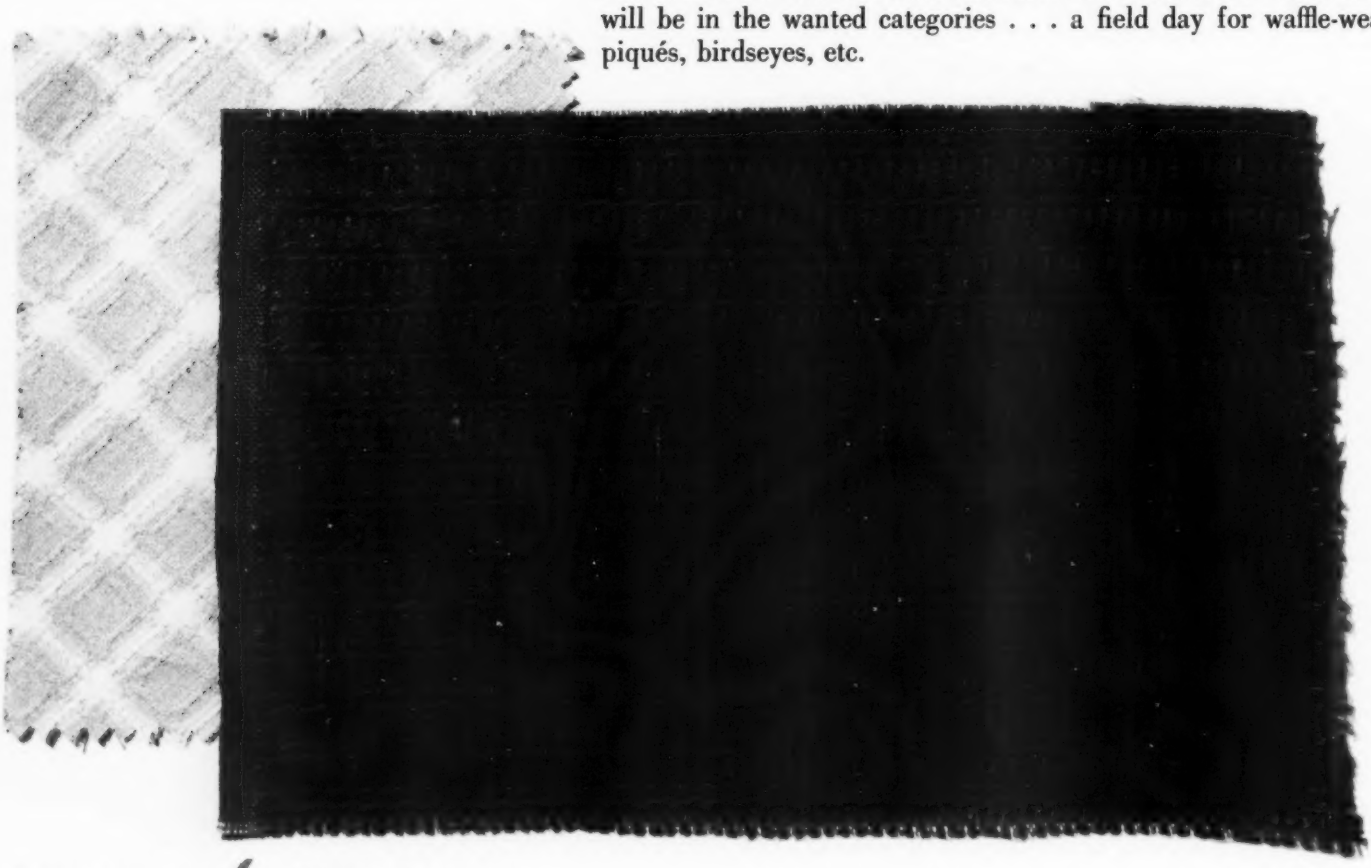
HERBERT MEYER creates a luxurious haut couture fabric in silk and rayon. Distinguished by a wool-like look, this textured blend is already spoken for by a number of the top fashion houses.



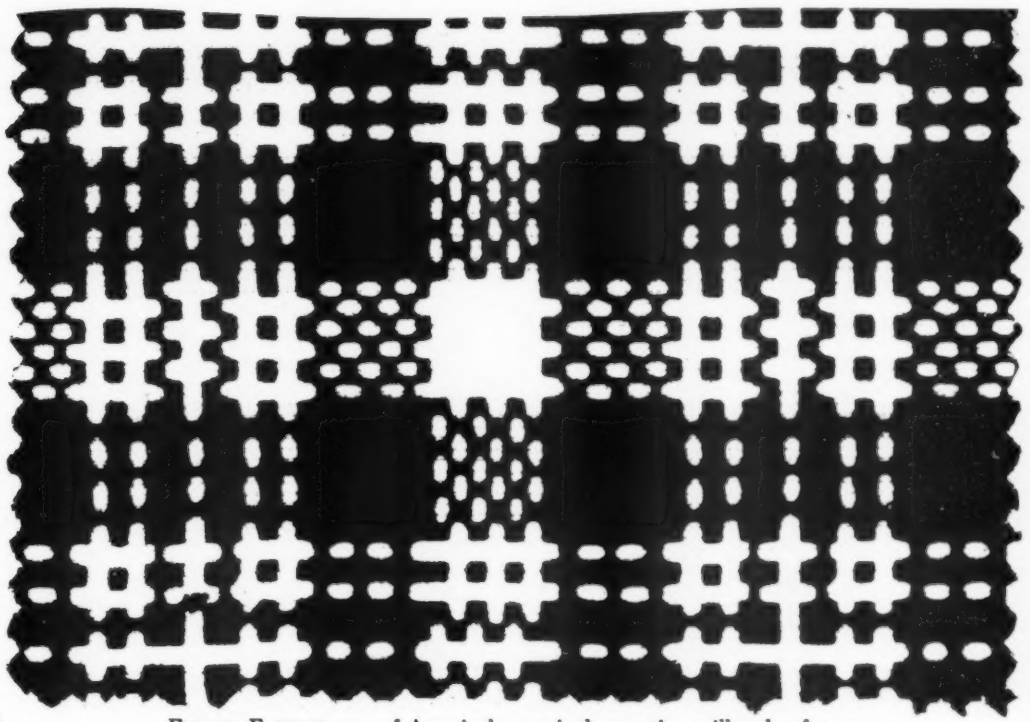


An important trend is toward COTTONS and BLENDS with TEXTURE.

There is great emphasis on surface-texture in both cottons and blends. Cottons which feature coarser textures and accentuated relief surface will be in the wanted categories . . . a field day for waffle-weaves, piqués, birdseyes, etc.

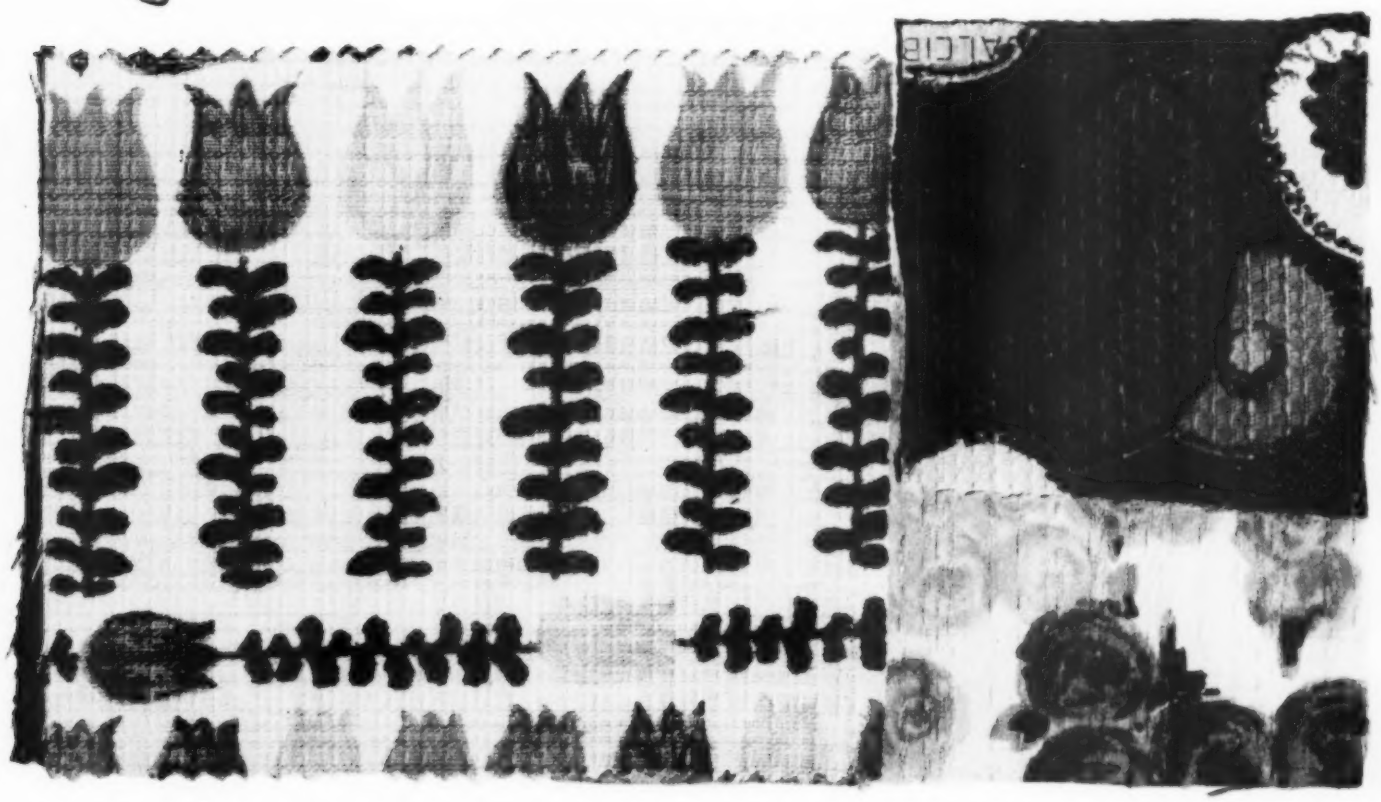


CHANEL'S embroidered organdy cocktail dress.



FULLER FABRICS, one of America's genuinely creative mills, also favors the broken geometrics in cotton prints . . . as shown by the example.

In cotton prints . . . Watch for a growing trend in the direction of semi-geometrical designs. Watch for more and more use of the American Fabrics Directional Colors which are shown at the beginning of this section.



FASHION REPORT

Today I've important news, my dears,
(You'd never guess in a thousand years!)
Milady can now discard her sack.
The old reliable shirtwaist is back!
Carnegie has it in her Blue Room,
Ohrbach features it in its new room,
With a billowy leg-of-mutton sleeve,
In the latest pebbly random weave.
Altman sells it in shrimp or mauve,
Bergdorf has one that's a perfect love,
All of them crying, "*Nous sommes ici!*"
What else for this week? Now let me see. . . .

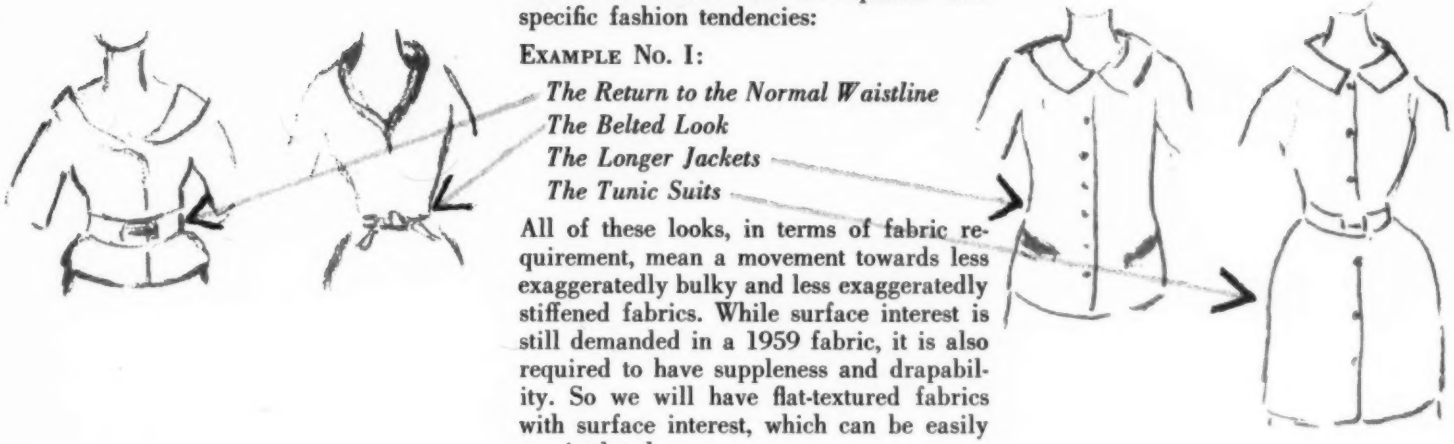
Cocktail dresses are simply divine,
There's one at Bendel's called After Nine.
The skirt is gored and ends in a flare,
With a satin bow on the *derrière*
To give it that certain *je ne sais quoi.*
(It's by that beautiful man, Goma.)
I almost forgot, the price is fine,
Only three hundred and eighty-nine.

At De Pinna it's Harvey Berin's day.
His latest is made of white waffle piqué
Printed with roses and earth-brown leaves,
With wide shoulder-straps instead of sleeves.
The edges are piped in the softest blue . . .
No wonder they call it April Dew!
But my own *amour,* my love, my dream
Is at Nina Ricci and called Jet Stream;
Vertical tucks climb up to the neck,
It comes in poppy and caramel check,
And there's a belt that you can lash on.
(Better be dead than out of fashion!)

Next week, Hats, made just for Her,
Good-bye, my pets, *au'voir, tout a l'heure!*

— CARLA KLEMPNER

LANVIN-CASTILLO's long-stemmed silhouette with high-belted effect using mother-of-pearl buckle. Note important trend toward sharp contrast between skirt and bodice.



Here are specific instances where the new fashion silhouettes can be equated with specific fashion tendencies:

EXAMPLE No. I:

The Return to the Normal Waistline
The Belted Look
The Longer Jackets
The Tunic Suits

All of these looks, in terms of fabric requirement, mean a movement towards less exaggeratedly bulky and less exaggeratedly stiffened fabrics. While surface interest is still demanded in a 1959 fabric, it is also required to have suppleness and drapability. So we will have flat-textured fabrics with surface interest, which can be easily manipulated.

The longer jackets, for instance, put emphasis on suiting type materials . . . on fabrics which have enough body to prevent undue riding. Glen plaid wools, checked wools, plaid tweeds, wool jerseys; loose, lace-type tweeds . . . these are examples of applicable fabrics.

EXAMPLE No. II:

The Chanel Look with its eased silhouette places emphasis squarely on three promising suiting fabrics:

1. The *mock-knits* which are woven fabrics with a more subdued rustic look.
2. The *houndstooth* (or district check type fabric) with the miniatures finding high favor.
3. The *favored grey flannel* is a combination of dark and light yarns in the worsted family mainly in a mottled effect, and augurs perhaps the return to smoother fabrics.

EXAMPLE No. III:

The Shirtwaist Dress and the Soft Pleated Look means soft (but not floppy) fabrics which have character with the surface interest of slubs. Suppleness is, of course, needed and the chiffons and crepes are two examples.

EXAMPLE No. IV:

Touches of White in neckwear and blouses freshen and feminize the checked woolen in its wide and easy silhouette. *Emphasis on collars and sleeves for top width* ushered in the fresh touch of *white* in piques, nubby cottons, silk organdy and pleated chiffons. (A good marketing opportunity for neckwear.)

EXAMPLE No. V:

The *Long-Stemmed Evening Fashion* calls for slubbed fabrics: the shantung satins, the silk twills and surahs . . . fabrics which have both character and surface interest.

EXAMPLE No. VI:

The *Floating Dream Look* means silk chiffons, silk slubbed gauze nets, and soft flower prints and silk crepes.

the FASHION BEGINS with the FABRIC...

The Floating Dream Look. Printed silk chiffon, by Jean Desses, photo by Peter Fink.

the SILHOUETTE INFLUENCES the fabric CHOICE

Contrasting Black and White is featured in Jacques Heim's design, which embodies crepe skirt of textured nylon, with white dotted black organdy blouse.

An Important Fashion Trend is towards the PUCCI SILK PRINT SHIRTS

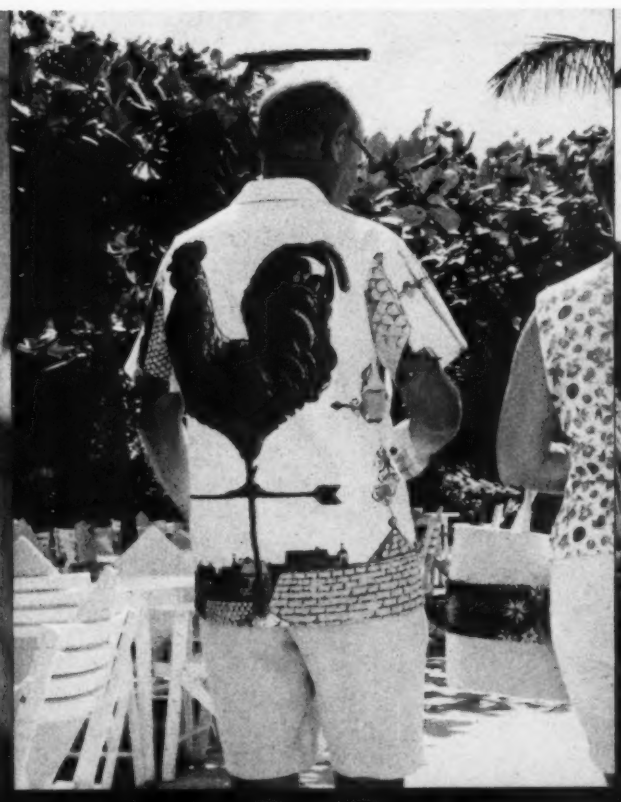
Emilio Pucci, the Italian designer, started a one man resort wear fashion with his printed silk shirts and pants. These literally swept the fashion scene in Jamaica and Florida this winter and should go on to even greater success in the future. AMERICAN FABRICS' exclusive photographs show these Pucci silk prints being worn at Palm Beach and Montego Bay.

Glamorized by individual designs, these Pucci silk prints point a definite fashion direction for resortwear.

Fashion Direction in Menswear

A Strong Trend is towards PRINTS in MEN'S SPORTSWEAR

Notable at winter resorts was the greatly increased interest in prints for sportswear. These prints were uninhibited as to design and coloring, and supplement the popularity of India Madras shirts, shorts and jackets. All signs point to an increase in prints for men's sportswear for the coming summer.



'ho-bo' Charmers by Rosecrest in Otra prints created by Lowenstein

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fabrics with the look of luxury

a fabric of cotton and AVISCO rayon

COTRON is a new family of durable fabrics that are a blend of fine cotton and AVISCO® rayon. The quality cotton contributes wet strength, launderability and greater durability. AVISCO rayon brings luster, clarity and brilliance of color *plus* smoothness, suppleness and infinite luxury of hand and drape. Ultimate and wonderful result—COTRON—with its minimum care requirements—one of the most dramatic and exciting family of fabrics of the year! Great in 1958—even greater in 1959.

AMERICAN VISCOSE CORPORATION, 350 Fifth Avenue, New York 1, N.Y. *TMAVC for fabrics made of Cotton and Avisco Rayon

Not all stretch yarn is *HELANCA*® yarn
Only ***Helanca*** yarns 1–pass stringent tests at the Heberlein Testing Station in High Point, N. C. for resilience, strength, uniformity, dyeing, knitting 2–are labeled ***Helanca*** 3–are subject to periodic inspection without advance notice.

Quality control is also exercised over fabric and finished products made by our licensees and bearing the name ***Helanca***.

Helanca Hi-Test yarn has high stretch characteristics and is used in better items for men, women and children.

Tights	Girdles	Colored stockings
Leotards	Panty girdles	Halters
Swimwear	Garter belts	Scuffs
Ski pants	Briefs	Gloves
Evening clothes	Bras	Bags
Men's briefs	Jackets	Ski pants

Helanca SW bouclé and ***Helanca*** SS smooth type yarns have just enough stretch to be self blocking.

They are used in	Men's sportshirts	Women's sweaters

Look for the *HELANCA* name or emblem.
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That's where your steady, long range business is.

HELANCA®

©Heberlein Patent Corp.

Helanca®

Helanca *is the well known registered trademark of the Heberlein Patent Corporation. It is Heberlein's brand name for nylon or polyester stretch yarn treated by its throwster licensees and for fabrics and products containing such yarn made by Heberlein's licensed manufacturers. The nature and quality of these yarns, fabrics and products are controlled by the Heberlein Patent Corporation, 350 Fifth Avenue, New York 1.*

CHATHAM
UPHOLSTERY

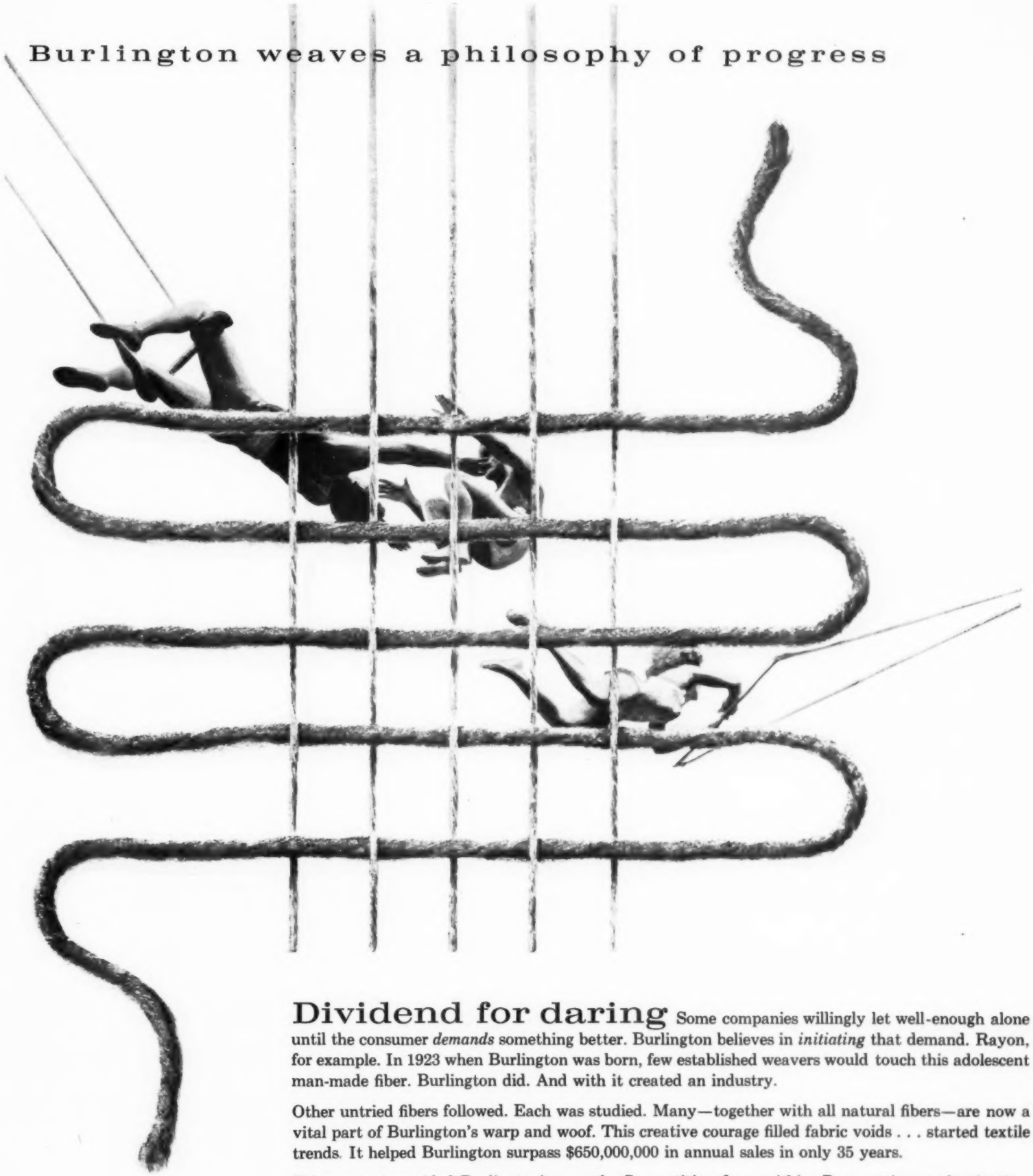
Anything you can picture, Chatham can manufacture. Working directly with the automotive industry on individual fabric weaves, textures and colors has long been a Chatham specialty. Founded over 80 years ago, this company is today operated by the fourth generation of Chatham sons. And family pride is a very good guarantee of quality.

Chatham Manufacturing Company
Mills at Elkin, Charlotte, Spray in North Carolina, and Springfield, Tennessee
Automotive Fabrics Representative: Getsinger-Fox Company, Detroit

COLOR ENGINEERED FOR AUTOMOTIVATION

The everything of Spring is here in this little-jacket dress, bowing from the waist. Shapeliest in Permathal® Everglaze® cotton knit by Alamac. Beige, navy or black. Sizes 8 to 16. About $60. At Bergdorf-Goodman and other fine stores. Andrew Arkin Inc., 530 Seventh Avenue, New York 18, N. Y.

Burlington weaves a philosophy of progress



Dividend for daring Some companies willingly let well-enough alone until the consumer *demands* something better. Burlington believes in *initiating* that demand. Rayon, for example. In 1923 when Burlington was born, few established weavers would touch this adolescent man-made fiber. Burlington did. And with it created an industry.

Other untried fibers followed. Each was studied. Many—together with all natural fibers—are now a vital part of Burlington's warp and woof. This creative courage filled fabric voids . . . started textile trends. It helped Burlington surpass $650,000,000 in annual sales in only 35 years.

Other practices aided Burlington's growth. Competition from within. Pace-setting modernization. Aggressive development and advancement of able young men. Burlington weaves a philosophy of progress . . . with the daring to do.

Burlington INDUSTRIES, INC.

"Woven into the Life of America"

. . . the world's largest, most diversified manufacturer of textiles, with 55,000 employees in 112 plants located in 83 U. S. communities and 4 foreign countries. 1430 Broadway, New York 18, N. Y.

once you have touched it,
you'll never let it go...

100% PUR

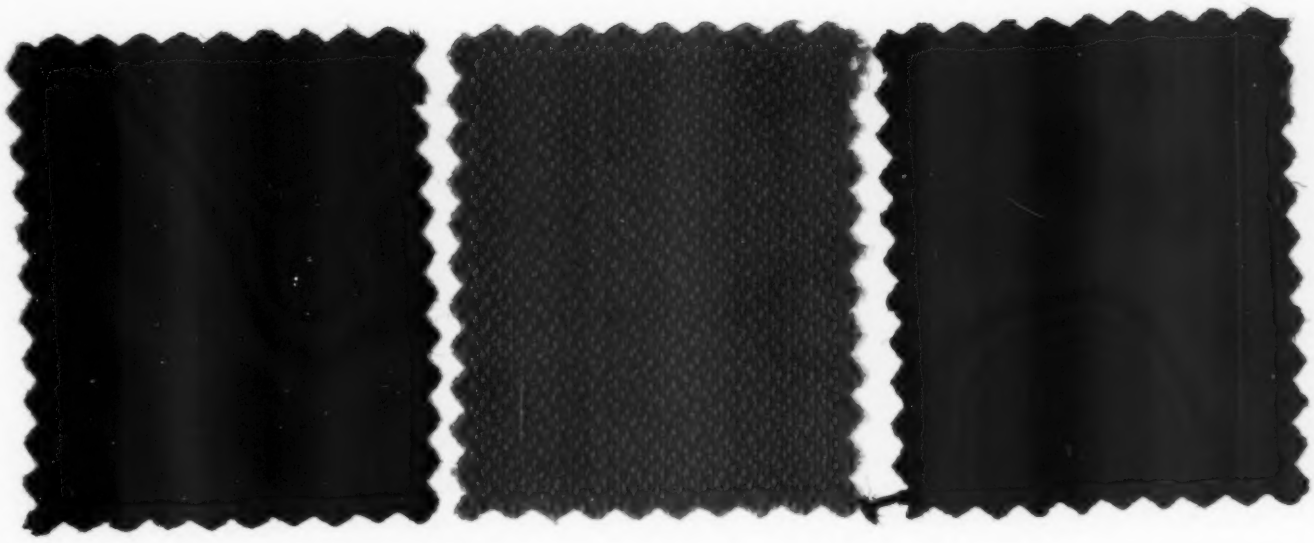
100% pure Zefran* is truly a major break-through in fabrics made of man-made fibers. At long last here is a fabric of 100% pure man-made fiber that has a 100% pure natural hand. Here is a fabric that will do everything performance-wise that the best man-made fiber fabrics are made to do. But here *also* is a fabric that will be accepted by the trade at "face value". The beauty of the fabric *alone* will move the trade to sample, to cut, to sell 100% pure Zefran. These worsted-spun fabrics woven by Westwood have all of the eye appeal and feel appeal that the trade has associated in the past only with natural fiber fabrics.

These fabrics, promoted as "Chadwick 100's", have the season's wanted "fashion touch". They satisfy the market's current desire for fabrics with a classic, tailored face, a worsted feel appeal, and crisp tailorability.

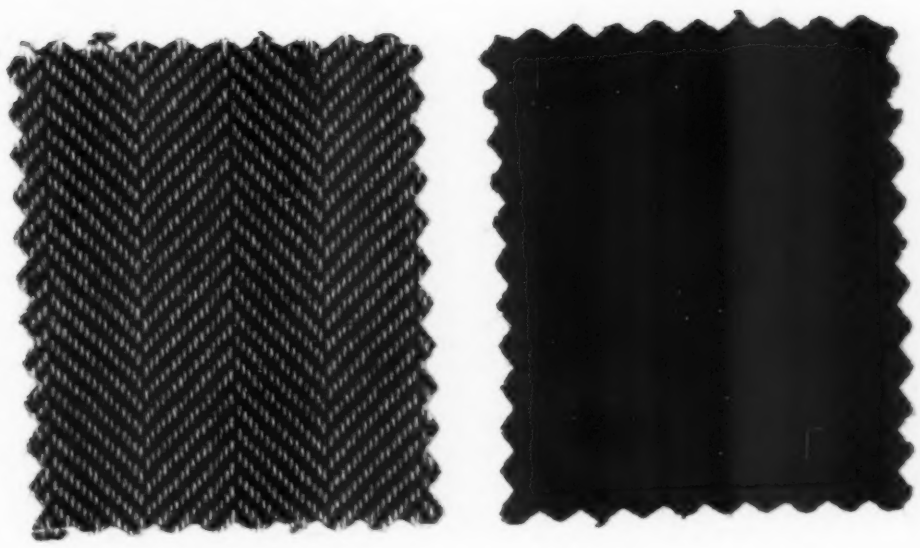
Oh, yes. They're vat dyed (patterns and solids are coordinated). They're permanently pleatable. They're machine washable. *There's even a PURE WHITE 100% pure Zefran fabric in the collection which feels like a natural, tailors like a worsted, and performs like a man-made WHICH YOU CAN THROW IN THE MACHINE AND WASH!*

ZEFRAN – the supernatural fiber fo

Selling Agent: Chadwick Mills, New York. PE 6-5565



RE ZEFRAN®

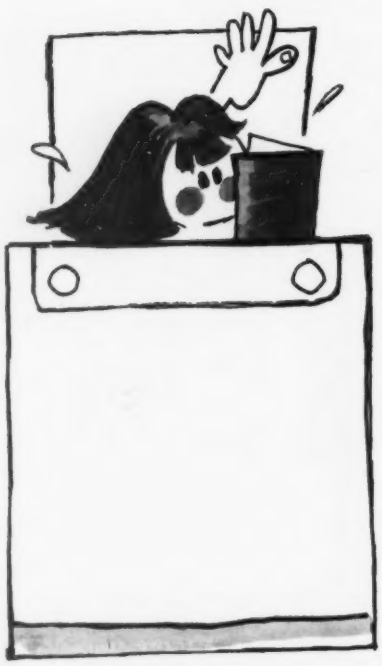


for the customer who wants everything

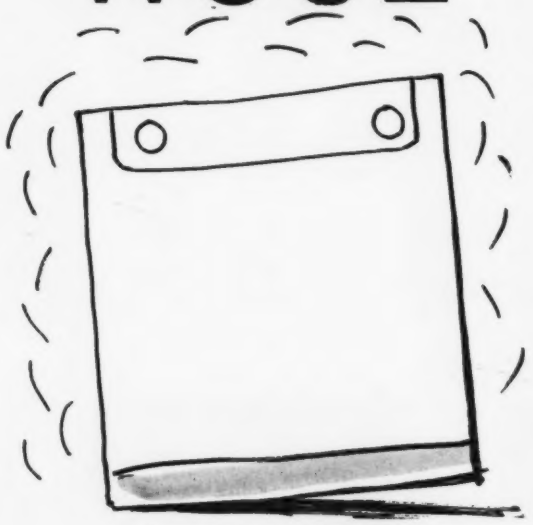
**acrylic fiber made only by The Dow Chemical Company, Textile Fibers Department, Williamsburg, Va. Dow makes fiber, not fabric or apparel.*

DYNEL

BRINGS WASH & WEAR TO WOOL



IN SHE GOES!



LOVE THAT ROCK-AND-ROLL!

LIFT this fabric!
FEEL the soft, wool-like hand!
SEE how it comes out of the washer!

WOOLMARK'S DYNAMEAU

WOOLMARK Corporation has taken full advantage of DYNEL's unique heat-setting properties to produce, for the first time, wool-and-Dynel blend fabrics that are machine washable, and rated "4" for wash and wear – little or no ironing necessary. These fabrics also combine unusual press retention and exceptional strength with a true woolen hand. Perfect for children's wear, robes and girls' sportswear, priced for profitable volume. For a wool blend that performs on all counts, look into DYNAMEAU without delay. Woolmark Corporation, 519 Eighth Avenue, New York, New York.

DYNEL • A UNION CARBIDE BRAND TEXTILE FIBER

Textile Fibers Department, Union Carbide Chemicals Company, Division of Union Carbide Corporation, 100 East 42nd Street, New York 17, New York. Offices in Boston, Mass. at 300 First Ave., Needham Heights; Charlotte, N. C. at 1213 Liberty Life Bldg.; Montreal, Que.; Toronto, Ont.

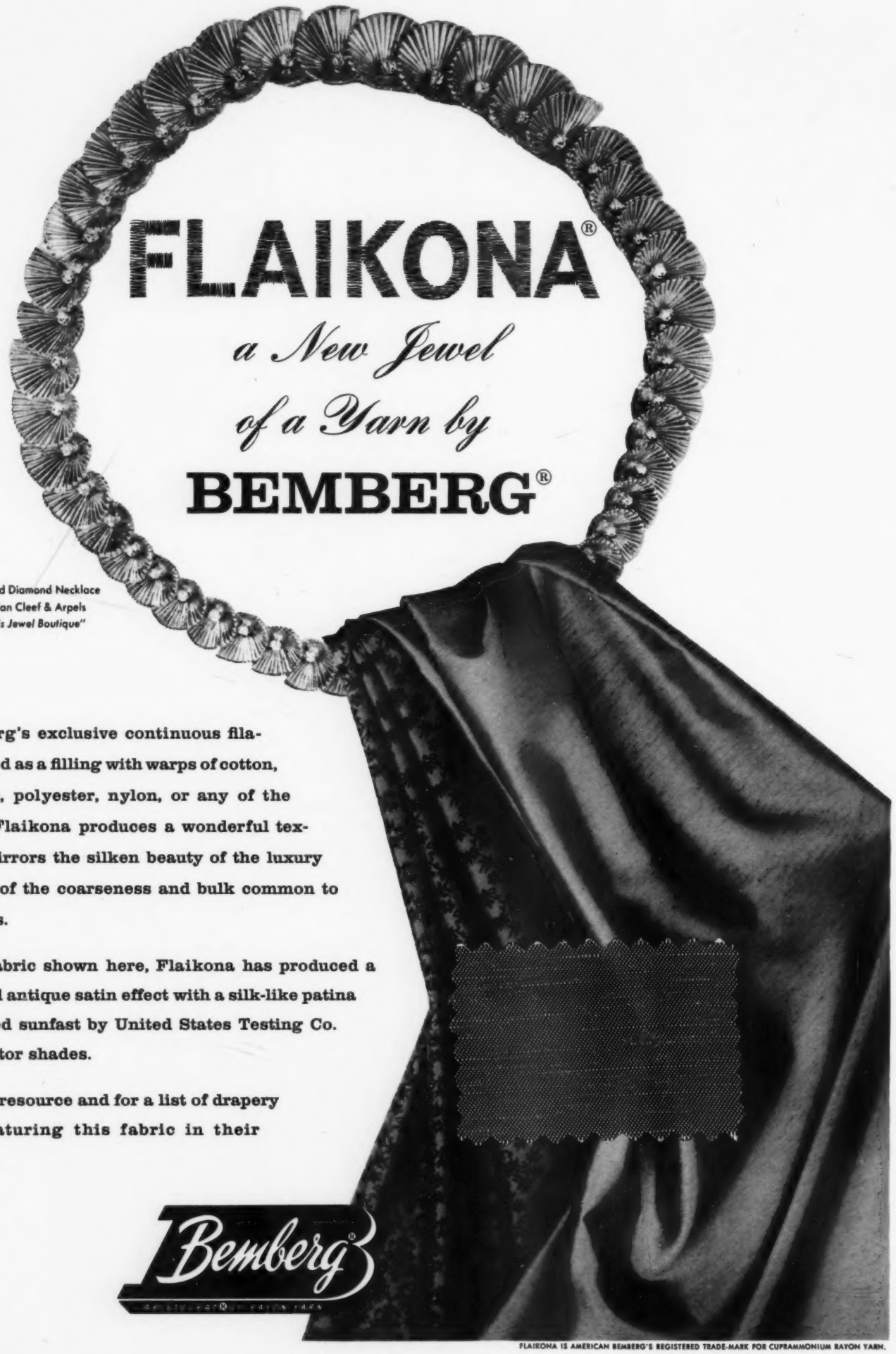
"Union Carbide" is a registered trade-mark of Union Carbide Corporation

Cottons
Gal & Lord
GALEY and LORD, A MEMBER OF BURLINGTON INDUSTRIES

FLAIKONA®

a New Jewel of a Yarn by

BEMBERG®



Gold and Diamond Necklace
by Van Cleef & Arpels
"Paris Jewel Boutique"

Flaikona is Bemberg's exclusive continuous filament flake yarn. Used as a filling with warps of cotton, silk, rayon, acetate, polyester, nylon, or any of the newer synthetics, Flaikona produces a wonderful textured weave that mirrors the silken beauty of the luxury imports, with none of the coarseness and bulk common to ordinary flake yarns.

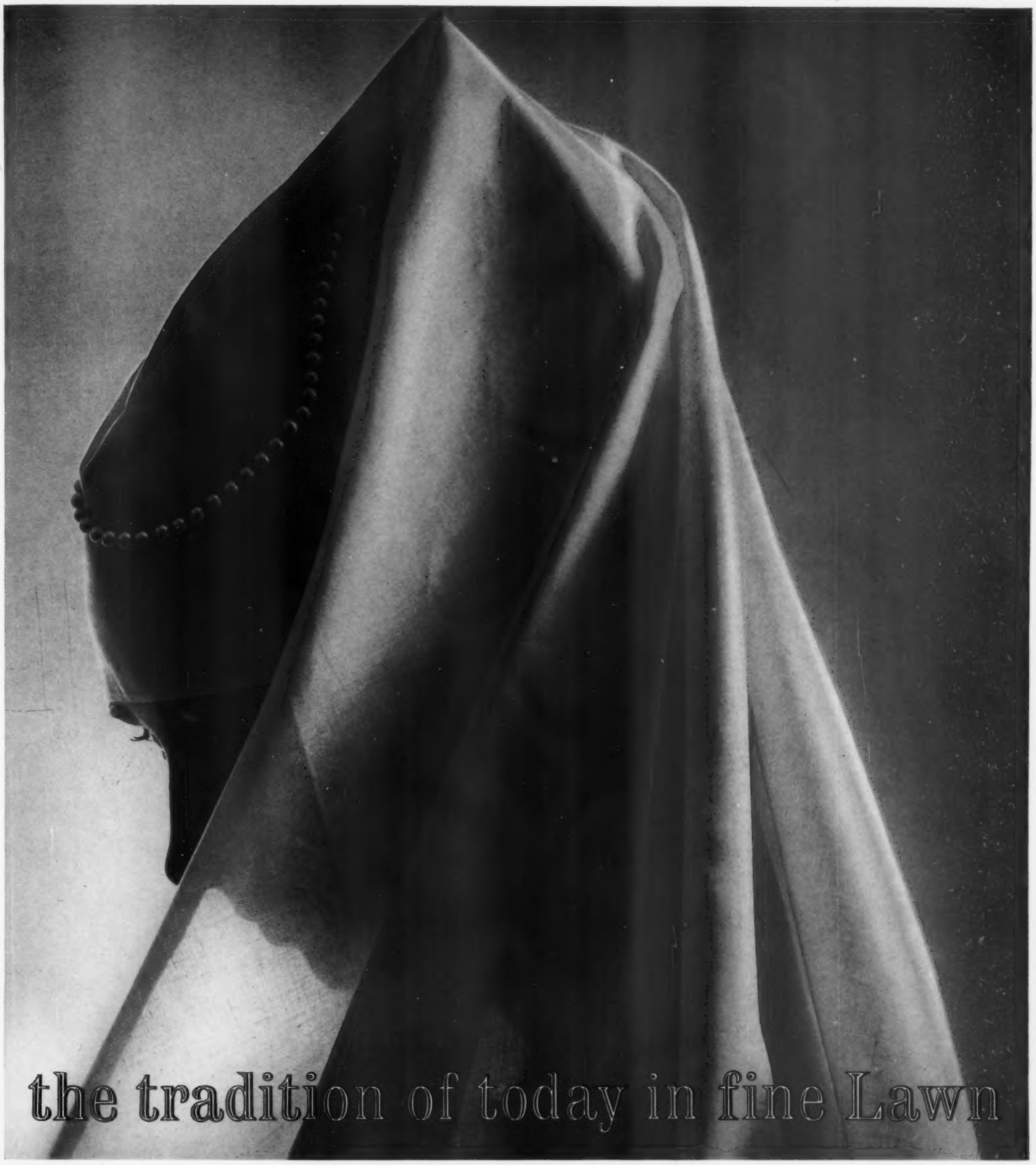
In the decorative fabric shown here, Flaikona has produced a luxuriously textured antique satin effect with a silk-like patina and hand... certified sunfast by United States Testing Co. 101 stunning decorator shades.

Write for the fabric resource and for a list of drapery manufacturers featuring this fabric in their current showings.

Bemberg®

FLAIKONA IS AMERICAN BEMBERG'S REGISTERED TRADE-MARK FOR CUPRAMMONIUM RAYON YARN.

AMERICAN BEMBERG • Main Office: 261 Fifth Avenue, New York 16, N. Y. • Plant: Elizabethton, Tennessee

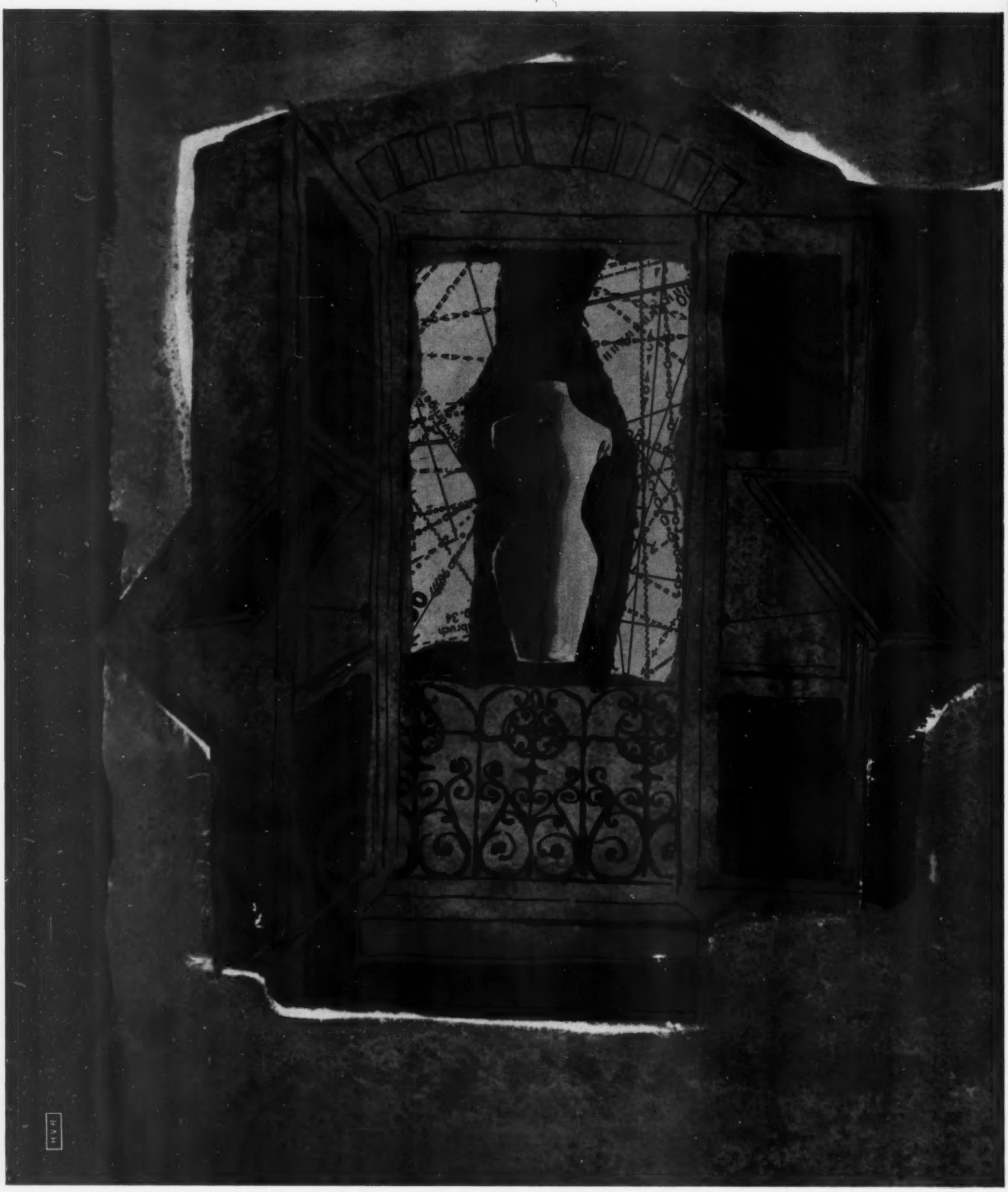


The name Berkshire Hathaway on lawn is a hallmark– a synonym for seventy-five years of quality, achievement, integrity. Specifically, take Caribee, Leisurecare, Petticare. See the dress that billows at a garden party, a connoisseur's choice in lingerie, the robe of a baby on christening day. All combed, 'self controlled' lawns, beautifully processed in a spectrum of colors. Tradition with innovations—in keeping with the times—this is

BERKSHIRE HATHAWAY

1430 BROADWAY, NEW YORK, NEW YORK

"self controlled" fabrics



Fashion begins with fit •SANFORIZED• TRADE ® MARK brings fit to millions

•*SANFORIZED*• and its internationally known sister trademarks •*SANFOR*• and •*SANFORIZADO*• signify that garments so labeled will not shrink out of fit

SANFORIZED • Division of CLUETT, PEABODY & CO., INC. • NEW YORK, N. Y.

For today's new age of Elegance...

metallic yarns of MYLAR® inspire rich design ideas for fashions

From bathing suits to ball gowns, never have fashion's fabrics been so elegant . . . so right for inspired uses of metallics. For these metallics offer you a wonderful opportunity to give exciting, style-setting touches to fashion's fabrics.

And, when these metallic yarns are made with Du Pont "Mylar"* polyester film, they are as practical as they are beautiful. Non-tarnishing metallic yarns of "Mylar" are strong and durable, yet fine and supple. They can be machine-washed or drycleaned . . . their unique strength makes them easy to weave or knit. Be sure to see the wide range of new colors and types of yarns now available.

*"Mylar" is Du Pont's registered trademark for its brand of polyester film.

MYLAR®
POLYESTER FILM

DU PONT
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BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

FOR ALL TYPES OF FASHIONABLE FABRICS, METALLICS OF "MYLAR" PROVIDE RICH NEW DESIGN OPPORTUNITIES

Suits and Dresses

Metallics of "Mylar" provide lasting beauty with practicality for fashionable brocades or washable cottons.

Intimate Apparel

Extra-fine metallics of "Mylar" are soft enough to be worn next to the skin, yet strong enough to withstand machine washing.

Linens

Table linens accented with metallics of "Mylar" combine the elegance of kings and practicality of modern fabrics for both formal and everyday settings.

Domestics

Towels, bath accessories and bedspreads flecked with metallics of "Mylar" provide a "special-occasion" look for year-round use.

Upholstery

In modern or traditional furniture, metallics of "Mylar", subtly used, complement the décor of modern living . . . withstand constant flexing and abrasion.

Draperies and Curtains

Metallics of "Mylar" retain their beauty year after year, require no special care. Curtains can be machine-washed.

For helpful information on how you can capitalize on the new design opportunities provided by metallics of Du Pont "Mylar"* polyester film, contact your metallic yarn supplier. Or send for our "facts" booklet on properties and uses for metallic yarns of "Mylar". Write E. I. du Pont de Nemours & Co. (Inc.), Film Department, Wilmington 98, Delaware. Be sure to mention your specific types of fabrics.

*"Mylar" is Du Pont's registered trademark for its brand of polyester film.

MYLAR®
POLYESTER FILM

DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
. . . *THROUGH CHEMISTRY*

"Mylar" polyester film is a tough, clear plastic film. It is *not* a metallic yarn . . . it *is* a base material used by leading metallic yarn manufacturers to produce finished metallic yarns of outstanding performance and value. Write Du Pont for list of manufacturers now offering metallic yarns of "Mylar".

The thread of the story is LUREX

Lurex, non-tarnishing metallic yarn made only by The Textile Fibers Department of
The Dow Chemical Company • Williamsburg, Virginia • New York: 350 Fifth Avenue • London • Amsterdam

IN THESE BUSY TIMES

why do executives like these *make*
the time to study carefully American Fabrics:

- **the leading makers and designers of men's and women's apparel**
- **the top echelon of American retailing executives**
- **heads of the outstanding mills and converting firms**
- **textile manufacturers and executives in countries all over the world**

The answer must be, as every *American Fabrics* reader is swift to understand, that this is a rather unusual type of magazine. It is unique and dramatic in presentation, to be true; on the other hand, it *is* factual about those things which will count for a long time. It presents fabric fashion and textile developments in a way which makes impact at the highest executive level.

Each copy is of inspiration to those who view textiles as they are: the world's second largest industry, one whose profits stem from the high level of creative merchandising as well as from the base level of construction.

It would be futile on our part to try to enlist everyone in the textile and allied industries as a reader because, quite frankly, *American Fabrics* is primarily a magazine for those who think and plan and work ahead. These are the reasons why our readers not only read each issue in depth, but treasure it as a permanent reference library.

American Fabrics

152 East 40th Street New York 16, N. Y.

Chemistry of Plant Products

THE
Plant

better
textured
nylon
starts here

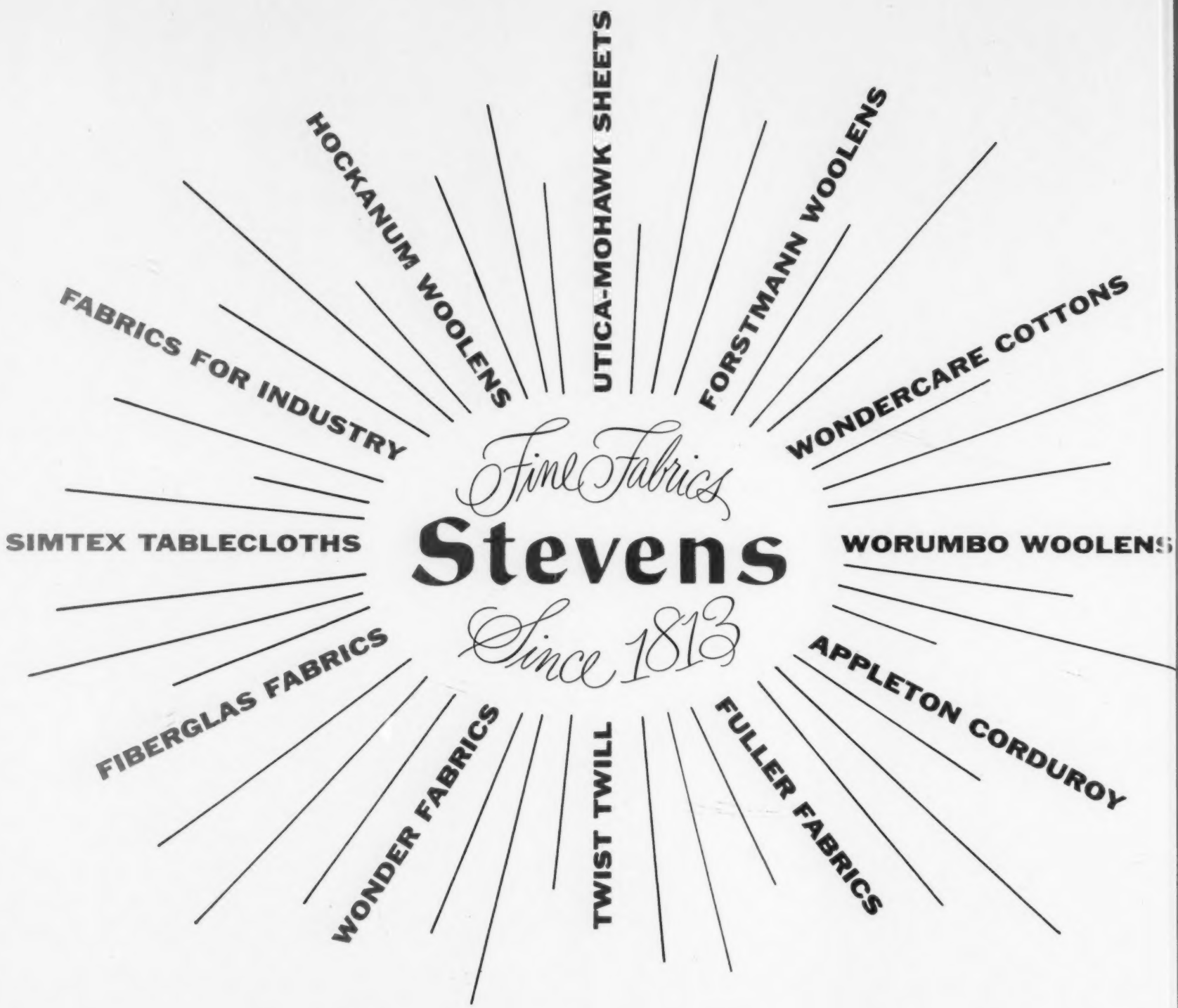
From the start, Chemstrand's extensive research, merchandising and promotion have fostered great new opportunities in textured nylon. The warp wind package you see here is a vital contribution to this end. It is a package specially designed to meet the specific, critical requirements for texturizing . . . that lets you transform the finest nylon yarn available, Chemstrand® nylon, into the best textured nylon offered today.

CHEMSTRAND NYLON

Chemstrand makes only the yarn; America's finest mills and manufacturers do the rest.

THE CHEMSTRAND CORPORATION, 350 Fifth Ave., N.Y. 1

Plants: CHEMSTRAND® NYLON—Pensacola, Fla. • ACRILAN® ACRYLIC FIBER—Decatur, Ala.



J. P. Stevens & Co., Inc. STEVENS BUILDING, BROADWAY at 41st ST., NEW YORK 36, N.Y.

All textiles are blends

of fiber and know-how!

There's more to good fabric than fiber.

It takes skill born of knowledge and experience to plan, to blend, to spin, to process the modern textiles that pour forth from nature's strands and man's superb synthetics.

The Textile Division of United States Rubber has that 'know-how'—the fruit of forty years of growth...of eleven diversified mills, a complete textile development laboratory...and one of the newest and largest research centers in America.

To users of yarns or fabrics for fashion or industry, "U.S." offers this *creative know-how*, plus *large and dependable production*, plus a *diversified line* for modern textile needs.

Creators and producers of

ASBESTON® yarns, tapes and fabrics for home and industry

LASTEX® and LATON® elastic yarns for intimate apparel and sportswear

USTEX®, chemically-treated, high-tensile yarns and fabrics

USPUN® natural and synthetic yarns for apparel and furnishings

Tire cord and chafer fabric . . . braiding and weaving yarns

US100^{N} and US200^{AN} twist-set yarns for tufted and woven carpeting

Synthetic filtration fabrics . . . Non-woven fabrics

TRILOK® 3-dimensional upholstery and 'spacer' weaves

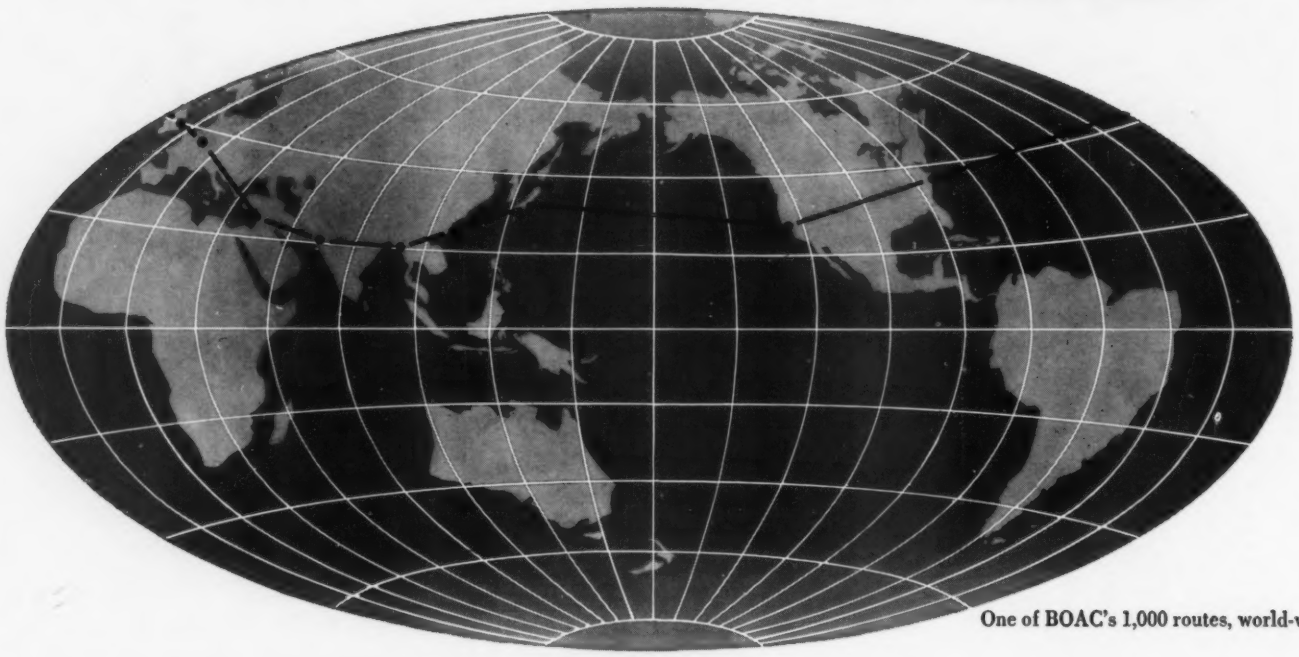
U. S. ROYAL and ROYAL-O® fabrics for fashion and furnishings

Textile Division

United States Rubber

Rockefeller Center, New York 20, N. Y.

NOW YOU CAN JET



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And your whole global flight, if you're going from San Francisco, for example, on a combination of Tourist and Economy fares, totals only $1345.90.

This low ticket means you have an opportunity to halt anywhere around the world and have a look-see at Bangkok, Calcutta, Beirut, Rome, Zurich, Frankfurt, Paris, London... other famous places, all on the same trip.

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TRAVEL AGENTS: Remind your world travelers that BOAC maintains scheduled flights on all 6 continents... with routes linking cities just about everywhere. World-wide cabin service by British-trained Stewards and Stewardesses. NOTE: The San Francisco-Tokyo portion of the route is subject to government approval.

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DIXIE Gears Color to Product with Fashion Authenticity plus Technical Service for Functional Properties

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COMBED PEELER SINGLE AND PLY
MERCERIZED SINGLES
DYED AND BLEACHED
CHEMICAL FIBER
TUFTING AND CARPET YARNS

ONDULÉ accents a new idea

exciting wall-treatment draperies of Du Pont "Ondulé" rayon and acetate

This season, draperies have more style than ever in this new, beautiful fabric. It's made of shimmering "Ondulé"* rayon with a Du Pont acetate warp. The "Ondulé" adds soft highlights, deep texture... luxury look. The opaque heavy-bodied drapery fabric shown comes in a variety of prints and beautiful embroidered designs on white as well as 18 decorator colors. For light, airy wall treatments, beautiful casement fabrics of "Ondulé" combined with "Dacron"** polyester fiber are suggested. Whether opaque or sheer fabrics for wall treatment are desired, beautiful "Ondulé" will fit the need.

Du Pont makes fibers, does not make the draperies shown

DU PONT
REG. U. S. PAT. OFF.

Better Things for Better Living... through Chemistry

**"Ondulé" is Du Pont's trademark for its random slubbed rayon fashion yarn. **"Dacron" is Du Pont's registered trademark for its polyester fiber.*

EDGAR SALES, LTD. features fabric shown through following and other leading decorator jobbers: Erbun Fabrics—New York • Reece B. Davis—Ft. Worth, Texas • S. Harris & Co.—Los Angeles, California • Pindler & Pindler—Los Angeles, California • Maharam Fabrics—Chicago, Illinois • National Textiles—Newark, New Jersey • Great Western Textiles—Kansas City, Missouri • S. Graham Wilson Co.—St. Louis, Missouri • Wesco Fabrics—Denver, Colorado.

BLACK PEARL

...its rare glow of color radiates sales...
exclusive in Princeton's Temptation

IF IT'S SILK **KANEBO** OF COURSE

KANEBO: Osaka, Japan • Kanebo-New York, Inc., 350 5th Avenue, N. Y.

THE GLEN RAVEN MILLS, 1430 BROADWAY, NEW YORK 18, NEW YORK LONGACRE 4-8866

The priceless ingredient of every product in the market place is the honor and integrity of its maker

Glen Raven

WOVEN AND KNITTED CLOTHS FOR THE CONVERTERS · GLENSPUN YARN FOR THE KNITTING TRADE · YARN DYED VIVATONE AWNING FABRICS

PLANTS LOCATED AT: BURNSVILLE, GLEN RAVEN, GRAHAM, KINSTON, NEWLAND, NORTH CAROLINA. SAN FERNANDO, CALIFORNIA

MAKERS OF FABULOUS CLOUDWALKER, LURON, SPECTATOR AND VIEWPOINT NYLON STOCKINGS

Arnel's way with Fall

New Arnel fabrics spell Fall at a glance, at a touch. They have substance—a weight in the hand and in the drape. They have texture and colors specifically designed for the frosty season.

Here you see a shaggy Arnel, a leather-look Arnel, and a tweedy Arnel in a herringbone weave. They are part of an impressive Fall collection—in knitted and woven fabrics with different, distinctive new looks.

All of these new-weight, new-season fabrics enjoy Arnel triacetate's famous ease-of-care. Manufacturers can see them at the Celanese Fabric Library. Call Elizabeth Stout, Fabric Coordinator, MU 9-6000, Ext. 265.
Celanese Corporation of America, 180 Madison Avenue, New York 16, N. Y.

Celanese® Arnel®

Celanese

CONTEMPORARY FIBERS

*This the official Arnel symbol—evidence that this fabric of this new triacetate fiber has been pre-tested for performance claimed.

Available At Last!

To: Apparel Manufacturers • Dress Designers • Textile Stylists and Colorists
• Mill Owners and Finishers • Retail Executives • Display Personnel
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PORTFOLIO OF AUTHENTIC BRITISH REGIMENTAL AND CLUB COLORS

55 actual Pure Silk specially selected samples
each identified by Regimental or Club name
Each one Authentic • Each one a Color Inspiration **$12**

QUITE ASIDE from the historical value of such a portfolio, we believe the selection of these Regimentals can be of productive reference value because of the great care which has been used in determining the colorings and patterns. The fact that these British Regimentals and School combinations have for so many years held such importance in consumer goods is (and certainly so in this country) far removed from the sentimental attachment which one might feel for "the Old School Tie" or for a certain British Regiment.

The extreme care and color-sensitivity which led to the development of each Regimental design is evident in the rather wonderful manner in which colors were selected, blended and then spaced. In the men's industry British Regimentals have always been a favorite in such merchandise as neckwear, belts and hatbands; in certain areas of women's wear they have taken hold rather well in recent seasons. It is the belief of A. F.'s Fashion Department that a much broadened market awaits British Regimental designs . . . in silk, in wool, in cotton and in manmades; for men, for women, for students among both boys and girls, and even for home decoration.

We have gone to great expense to prepare this Portfolio of Authentic British Regimentals, to assist those who may need guidance as to the proper colorings and combinations. The portfolio is printed on heavy special paper, suitable for mounting; each of the 55 actual swatches is identified as to its historical origin. As in the past, these special portfolios covering such major design areas as Clan Tartans, Paisleys and India Madras have met with rather speedy acceptance by our readers; therefore, since this again is a limited edition, may we suggest that you cover your requirements soon? Please send order with check to:

AMERICAN FABRICS MAGAZINE

152 EAST 40th STREET NEW YORK 16, N. Y.

AUBURN SILKS ARE PERFECTION SILKS

Silk has no equal for luxurious drapeability... and Auburn has no equal for Perfection Silks. Designed with imagination and COLOR-PLANNED for every cutting and selling advantage...your every requirement is anticipated in broadcloths, tweeds, ginghams, tone-on-tones, plaids, stripes and solids.

See them all...but especially "Escapade," a debut broadcloth of luxury weight and full body, for year-round wear.

If you cut silks for SHOWING...cut Auburn for SELLING!

PURE SILKS FOR SPORTS AND CASUAL WEAR

AUBURN FABRICS, INC.

215 WEST 40th STREET • NEW YORK 18, NEW YORK

It's the exclusive permanent crimp in the yarn that puts the plus in Ban-Lon® sweaters

Beautiful

Ban-Lon®

"Ban-Lon" sweater by Blairmoor

sweaters are dependably different

Behind the beauty of carefree "Ban-Lon" sweaters is a remarkable difference which explains their super softness, luxury, stability, and resistance to pilling. Unlike ordinary sweaters, these easy-care flatterers are knit of filament yarn with an exclusive crimp, a unique permanent wave that keeps them smartly in shape without shrinking or stretching, assures automatic wash-and-wear performance, eliminates blocking. For information about "Ban-Lon" sweaters, contact your regular source of supply or write: "Everglaze" Marketing Division, P. O. Box 189, Wilmington 99, Delaware.

the test is in the touch

BAN-LON Quality Garments

For Your Protection
Sweaters which carry this trademark must pass rigid quality and performance tests

"Everglaze" Marketing Division, Wilmington, Delaware, supervises the international merchandising of the "Ban-Lon" and "Everglaze" trademarked products of Joseph Bancroft & Sons Co.

Pure Silk Fabrics

MAYAR

MAYAR SILK MILLS, INC., 330 FIFTH AVENUE
NEW YORK 1, NEW YORK ••••• LA 4-7417

S-C-T yarn colors, in a great and glorious variety, pace the fashion times.

The QUALITY of S-C-T dyed mercerized cotton yarns remains constant, year in and year out. They give to fabrics glowing lustre, strength, a fine hand, lasting good looks... QUALITY. QUALITY is priceless... and QUALITY sells. S-C-T's highest standards of QUALITY CONTROL in spinning, even mercerizing end to end, level dyeing, and warp or package bleaching assure smooth running and uniformly good results.

PLANT SPRING-SUMMER '60 SALES with Coosa Colors selected by American Fabrics. Write for your Coosa Color Tree of yarn samples showing the top 12 fashion-right shades for next season.

S C T

STANDARD-COOSA-THATCHER

SPINNERS | MERCERIZERS | DYERS | BLEACHERS

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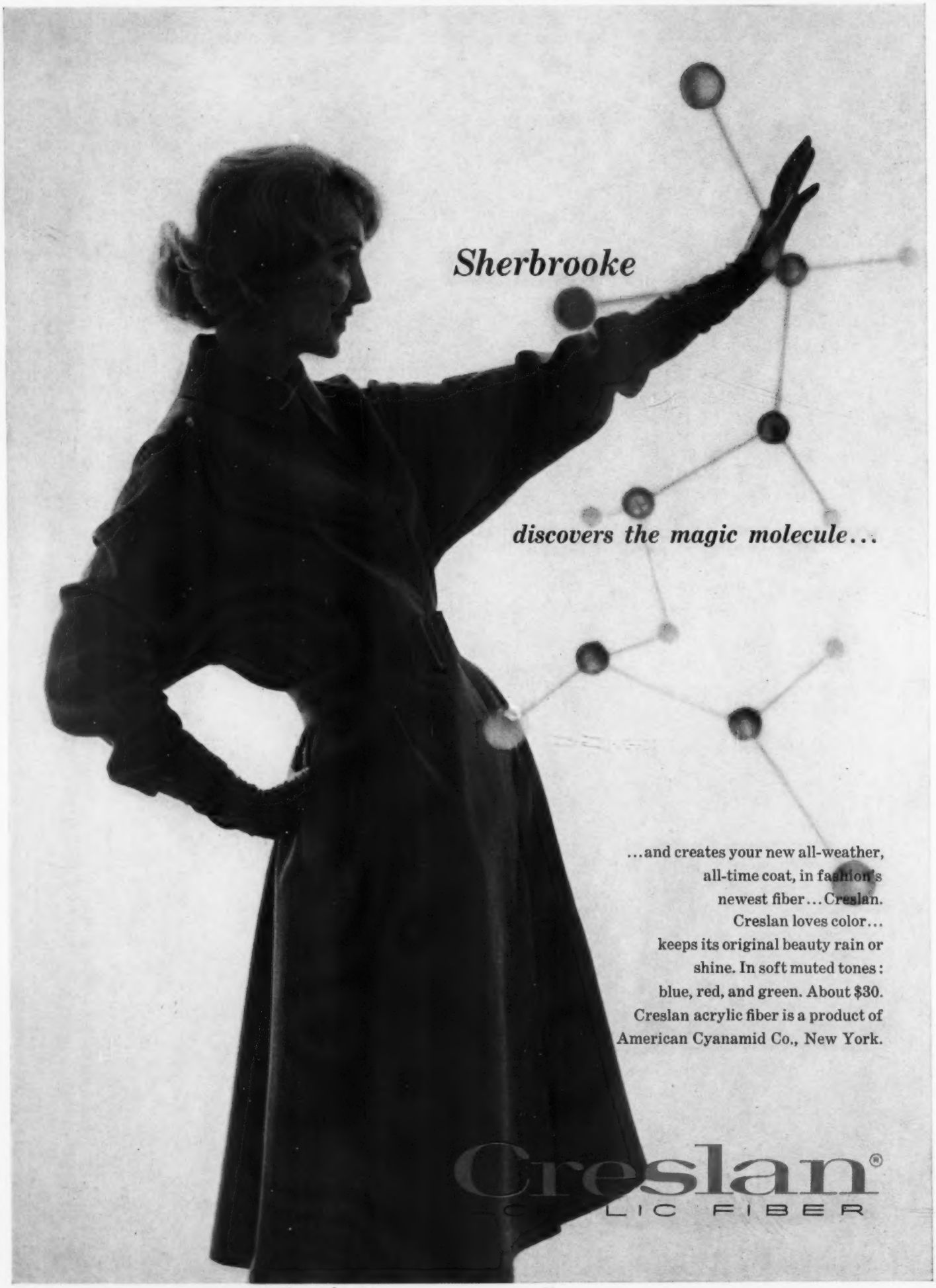
The International Standard for wool washability and shrink resistance.

STEVENSONS (U.S.A.) INC.

21 EAST 40th STREET, NEW YORK, N. Y., OR 9-8575


Sherbrooke
discovers the magic molecule...
...and creates your new all-weather,
all-time coat, in fashion's
newest fiber... Creslan.
Creslan loves color...
keeps its original beauty rain or
shine. In soft muted tones:
blue, red, and green. About $30.
Creslan acrylic fiber is a product of
American Cyanamid Co., New York.
Creslan®
LIC FIBER

Fabric by Earl-Loom of Creslan acrylic fiber and rayon.

AMERICAN FABRICS NO. 46

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A Foreword from the Publisher:

In this article the cold facts of world population and textile production have been subjected to impartial scrutiny. In this clear light it becomes apparent that by the end of this very century there will either be a crying shortage of textiles . . . or the explorers and developers of synthetic fibers will have successfully closed the gap between what Nature can supply and what Man will need. The facts in this executive-level study speak for themselves . . . WCS.

THE TEXTILE PROBLEM OF TOMORROW:

Adjusting the World Production of Fibers to what Mankind will Require by the Year 2000

by Charles de Cizancourt

TEXTILES CAN BE RANKED next to food among the great and pressing problems of the modern world.

Up to now men have used natural products in clothing themselves — flax, wool, silk, cotton, skins, furs, and so on. In recent years, however, textile consumption has accelerated, due to two facts both characteristic of our time:

1. Increasing World Population: world population is currently estimated at 2,655 millions. It is increasing at the rate of 2½% per annum, which indicates a world population of 5 billion before the new century.
2. A tremendous increase in Needs: the standard of living is currently undergoing a general upward trend. Times in which many people went practically naked have changed. The backward nations are seeking today to clothe themselves like others; and, like the others, they are demanding better textiles.

This poses a problem.

Until now the earth's natural textile resources have been sufficient to clothe world population and even create a certain surplus. With an increasing demand, can the production of natural textiles be proportionately increased?

I. Current data

Annual world textile production has risen to about 14 million tons (including bast and hard fibers) which, for a population of 2,655 millions, represents a per-capita average of ten to thirteen pounds. Moreover, as of today, the average per-capita consumption has risen to four and one-half pounds for the less-favored countries, eighteen pounds for France, and thirty-six pounds for North America.

Assuming an average of eighteen pounds, that is, taking consumption in France as a standard for average human consumption, it appears that the production of natural textiles today is already more than 4 million tons less than the standard total demand. In fact it can already guarantee only a bare three-quarters of the legitimate per-capita requirement. In 1958 the world consumption of manmade fibers made up the 25% differential.

Assuming that the world population continues to increase at the present rate it will, in some forty years, reach a total of 5 billions; in terms of the above calculation, the total textile requirement would appear to be at least 40 million tons.

Natural textile production, at its present figure, would then only cover 40% of human needs, or in the light of these data would have to increase by 250%. It does not seem possible to augment the production of natural textiles to this degree.[1]

II. The future bottleneck

(a) Cotton

Compared with a century ago, world cotton production has increased sevenfold, but it appears to approach its maximum. The requirements of cotton cultivation limit it strictly to a few special areas: it will grow only between latitude 40°N and 80°S; during the whole growing cycle (of not less than 200 days) it requires a constant temperature of 75° to 80°F., and a quite considerable quantity of moisture — 15-25 inches of rainfall — is needed during growth and germination. On the other hand, without absolutely dry conditions during the bearing period the cotton will become damp and the crop will be spoiled. It also requires a soil which is deep, well-tilled, porous, and rich, with plenty of phosphoric acid, potash, and products of organic decomposition. Finally, from preparation of the ground to harvesting of the crop, cotton cultivation is demanding and requires a considerable labor force which must be hardy and accustomed to particularly difficult and ill-remunerated working conditions. With the development of backward areas and a general rise in the standard of living, such conditions will inevitably be less and less common. Here and there, particularly in Egypt, Georgia and South Carolina, cotton is now grown only in combination with other crops.

In the United States, for a combination of political and economic reasons, the extent of cotton cultivation is rigidly restricted by the Government; even so, each year a sizable stored surplus of cotton is sold or sent to foreign nations. However, it is estimated that even if all restrictions were lifted, if mechanized planting and raw cotton processing were given full freedom, the increase in the total crop would fall short of population needs by the turn of the century.

(b) Wool

Wool production for the current year of 1958-1959 promises to approach the all-time high of two years before, when the figure reached 5,070,000,000 pounds grease basis; this year the estimate is for 5,015,000,000 pounds. At the present moment there is no Governmental stockpile, either here or abroad, to use as a backstop. In some quarters it is stated that there is a trend, particularly in Australia and New Zealand, toward the use of the land for food crop and other population needs; but in actuality, this is not so: the hitherto unimproved and unclaimed areas in those countries are steadily being thrown open to the public, and this is mainly where the new food-crop demands are being supplied.

(1) see A. Alix & A. Gilbert: Geographie des textiles, and Tremelloni: Industria tessile alla meta del seccolo, 1951.

It may be of interest to note that last year, while the total world wool production was climbing up, the Argentine and Uruguay production slid off slightly.

As world population increases, naturally more of the foregoing type of land will be needed for living and for food development; but even if the wool-growing industry were to hold fast to every inch, it is evident that the population of 1959 is utilizing the entire wool crop . . . and that by the end of the century there may be a relative shortage of this fiber.

On the other hand, it does not seem possible to anticipate any increase in the current rate of yield. The annual produce is nine to eleven pounds per sheep, which probably approaches a maximum since the average was formerly four and one-half pounds. In addition, the sheep farmer has a tendency to give up sheep-raising in favor of more profitable meat production.

(c) Bast and hard fibers

Flax, hemp, and jute (like silk) are products which flourish only in certain localities and there is therefore no question of relocating them elsewhere (attempts have been made). They can serve only therefore for the areas producing them for apparel or home needs, and that insofar as they will not conflict with other requirements; for example, with food production, which is even more urgent.

So for cotton, wool and flax, production increases cannot be expected to meet increasing population and consumption; it even seems necessary to envisage a fall in production in certain areas.

Nature seems indeed, under the increasing pressure of human demands, to be forcing the man of tomorrow to find his own clothing materials if he does not want to go about naked.

III. A SOLUTION: WHAT CHEMISTRY HAS BROUGHT TO THE TEXTILE INDUSTRY.

Where will man henceforth find the means to ensure not merely his own existence, but to respond to the pace his spirit is setting? Can he fill in the coming void in nature's resources, which now threaten to limit him in terms of his own creative achievement and the progress to which he aspires?

In the field of foodstuffs the question has been raised and today is being partially answered by the addition of certain chemicals in either growing or processing. In the field of textiles, a hope is growing that man can develop expansion of the economy in proportion to the future normal; chemistry, when turned to man's service, allows him to create the textile materials which he increasingly requires to maintain or raise the level of his existence.

Science and technology in fact allow man today to become independent of nature. They open the vast, miraculous possibility that he alone can create, in any quantity, the materials he requires and those precisely corresponding to his needs.

This tremendous revolution is only a few years old. Man-made textiles were born fifty years ago, synthetized textiles scarcely twenty years ago; but their development has been suddenly so prodigious that they currently represent, in total, nearly 25% of world textile production. Their growth at an ever brisker pace indicates that they will soon pass this mark and if necessary take its place. This allows us to conclude that what was at first a revolution may grow to be a major part of the *modus vivendi* of the future.

IV. WHAT ARE MAN-MADE AND SYNTHETIC TEXTILES?

This represents, indeed, a change in the relation between man and nature. Man is taking possession of matter and employing techniques which permit him to reconstitute nature in the laboratory and factory, and also create hitherto unknown substances capable not only of replacing natural materials but of complementing them with new qualities.

Thus for half a century the textile industry has been enriched by a host of inventions revealing new materials which have immediately widened its scope, and at the same time have fulfilled needs which are also new.

Rayon, Fibranne, Nylon, Perlon, Orlon, Rilsan and others, have made their gradual appearance to join wool, silk and cotton. They have imposed themselves not merely as substitutes (which they once were), not merely as new materials (which they now are), but as products doing duty in default of nature, and are giving man the means to meet the future he both desires and deserves.

At this point opinion is unanimous; man-made textiles have achieved citizenship not by virtue of their mere existence, but by their validity; not only because they can substitute for the silk deficiency (long since evident) or for that of wool and cotton (which is becoming evident today) but because they add to the available qualities of these textiles new qualities which are able to respond to all human needs.

This is in fact their strength and their justification. They may, by degrees, free him from the quantitative dependence in which nature threatens to hold him, and from the limits which he had perforce set on the variety of his tastes. From them, and from the chemistry which continually produces and revises them, man can hope to satisfy each and every desire he can have through the use of materials precisely and exactly tailored to the end use.

The Future of Scientific Textiles

Thus scientific textiles give human economy the means to meet all its growing requirements and in addition offer a further benefit to the consumer.

It is easy to conclude that in view of these remarkable facts the development of scientific textiles is completely assured and that they will hold an even more important place in the textile industry of the future.

Fact, necessity and progress all bear witness to the total possibilities which science has for the first time placed at man's service; to fulfillment of his destiny apart from nature; and to the power which, from now on, he must himself create. This is indispensable to the expression of his textile needs, whatever they may be quantitatively or qualitatively.

Such a liberation had, indeed, been foreseen by their first promoters. When in 1890 the Frenchman Chardonnet first achieved an artificial fiber from a nitro-cellulose base, he was pursuing the idea of placing within the reach of all, and not of the privileged few, a substance comparable to silk.

The New Textile Revolution

There followed, for some fifty years, a germination in France, Germany, Britain, Italy, Japan, the United States, of noteworthy and courageous efforts, and a succession of realizations which progressed with giant strides towards imposing a new direction on the textile industry. Thus between 1890 and 1940 rayon and acetate production rose to more than one million tons, practically equalling world wool production.

But such a growth, much though it may have accomplished, was far from realizing its full potentialities. It still lacked a philosophy, a style, and its final definition.

Artificial textiles (regenerated cellulose) were for a long time looked upon as textile substitutes, and they owed their

use to pressing need. Their real sense and the revolution which they were to bring to textile economics was still far from being seen.

For this to become possible it was necessary to pass from the realm of textile substitution to the realm of textile creation; to dare to replace the play of nature by the game of chemistry; and to cross the gap from imitation to invention.

After 1930, following the work of H. Staudinger and his team on macro-molecules (the origin of plastic materials and of synthetic textiles), there appeared a hope in the laboratories of the possibility of actually reconstructing nature, and of reaching a total creation of matter starting from chemical synthesis and new elements brought into its processes.

After many fruitless efforts and much disappointment, this hope was realized before the war of 1939 in concrete form.

The Development of Nylon and Perlon

Carothers in the United States and Schlacht in Germany almost simultaneously succeeded in producing two materials, Nylon and Perlon, which were to revolutionize the textile industry, and were to open the way for a series of inventions which followed. They established the fact that man could now, thanks to chemistry, send out from his laboratories a stream of new and hitherto absolutely unknown materials, the manufacture of which could be considered as unlimited.

Such a spectacular result was not merely an achievement for science — it was, through science, the first completely documented victory of man over nature; it put mankind in a situation of utter mastery over materials, and he could determine them according to his necessities and tastes.

Perhaps such a change was not immediately recognized. Today, indeed, on account of the vested interests of habitual routine thought, it is still only partially seen; the fact is noted but its significance has not yet been recognized.

All the same, as soon as the fact emerged the great chemical industry of the world seized on it immediately and has continued to put the idea to work and to promote it in every country where sufficiently advanced industrial techniques exist: in the U. S. A., DuPont de Nemours, Chemstrand, Dow Chemical, Eastman, Enka, and American Cyanamid; Great Britain, Imperial Chemical Industries; in West Germany Hoechst and Bayer; in France Rhone-Poulenc, C. T. A. and Pechiney; in Italy SNIA Viscosa.

The Beginning of Orderly Procedure

It may be noted that in the face of such imposing competition the gamble of getting the first break has been superseded by order, discipline and doctrine. When the effectiveness of synthetic textiles and their power for human freedom was grasped, the industry spontaneously turned to quality improvement, to an assessment of their true place and the fulfillment of their possibilities.

Because of this, synthetic textiles have been developing for the last ten years at a prodigious speed, have doubled their production in the last three years, and have multiplied in a spectacular way, which points toward the development of a particular textile for every specialized use.

The tiny production which existed in 1950 today has reached more than 600,000 tons and will probably exceed 1 million tons in 1962 (U. S. S. R. excluded).

This progress is far beyond the scope of our evaluation today, and probably in a few decades it may seem absolutely primitive to be clad in wool or cotton, absolutely primitive to have ever used such fuels as coal or gasoline, or to have made steel in a blast furnace.

The Conditions of the Future

The balance between production and current demand, which is proper to a living, creative economy, brings with it its own compulsions.

Scientific textiles, artificial and synthetic, being chemically created tend to become less and less costly, and for this reason a major risk is involved for those who undertake their production.

If scientific textiles can, in principle, fill our collective needs, they can do so only on the basis of very heavy investment. If scientific textiles are going to fulfill the diversity of human needs — and that is their justification — this can be accomplished only with the help of ceaseless research, of more precise adaptation, of flexibility and ever new approaches towards these needs.

On the one hand, indeed, this operation requires a considerable prior investment in plant. Du Pont de Nemours, Inc., in the United States, has invested $27 million in manufacture of nylon and $35 million in making Orlon; Imperial Chemical Industries has invested £48 million in Terylene and £20 million in Ardil; and recently, in France, Pechiney has invested 20 billion francs in Rilsan. Even Japan, considered the home of silk, has made major investments in chemical fibers.

On the other hand, the risk in which they are involving their backers is tremendous. It is only in use that a new material reveals its qualities, and there is nothing to guarantee that, when launched, it will not immediately be eliminated by another material better adapted to current requirements.

Scientific textiles by their very nature are subject to the need for ceaseless renewal and perpetual perfecting. This entails constant research, the cost of which must often seem disproportionate to the results to be expected.

Tremendous Research Investments

Companies such as Du Pont in the United States, Hoechst and Bayer in West Germany, and Imperial Chemical Industries in Great Britain, to cite only the largest, spend annually in research some 4 to 6% of their gross, which may mean more than $125 million for research alone.

From this it may be estimated that the world chemicals industry (of which plastics and textile materials represent at least 20%) devotes to scientific research the staggering sum of more than $250 million (excluding the U. S. S. R.).

Such an effort and risk are certainly astonishing in relation to the premises of the problem, and no less so because we see in scientific textiles only a pair of hose or casual dress.

It is of decisive significance, in that the great chemicals industry has already become aware of the revolution that is in the making and of the benefit which man himself, today only partially aware of it, may derive.

And not less so, that with the capitalist system as the vehicle — through the idea of a guaranteed return — the great chemicals industry has not hesitated, by way of affirming its faith, to engage in so formidable and hazardous an adventure. Such a change, indeed, is a corollary of the nature of the work it pursues.

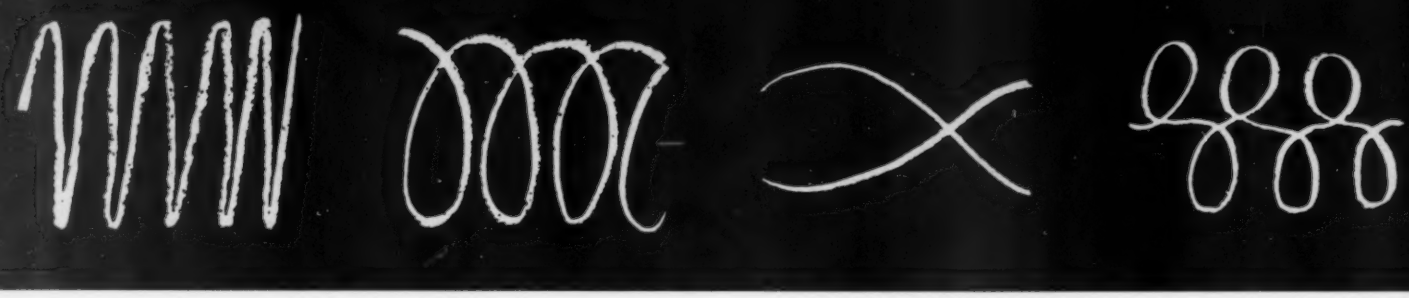
And it truly bears witness, in an exceptional fashion, to the capacity of capitalism, when it sets out to "help" and not to "help itself" to create the future triumphantly.

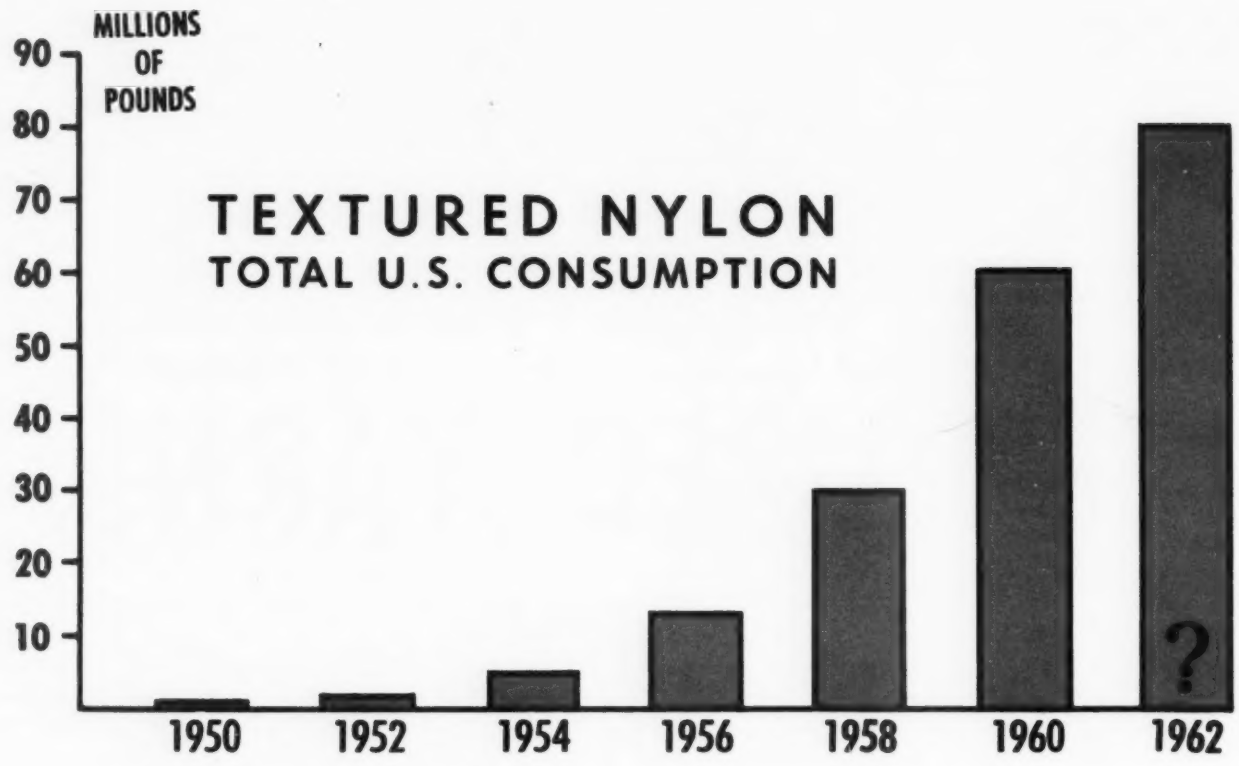
More Sales and More Profit will
accrue to the Textile Industry during
the next decade through

TEXTURED YARNS

Through the added application of the Three C's... COIL, CURL and CRIMP... the laboratory technologists have added Surface Dimensions which promise to unfold new and profitable areas for fabrics woven and knitted of chemical fibers. Texture has always held an important niche in fabric and fashion appeal. It has always served to spur the sales of natural fibers when there was need for stimulation. Now American Fabrics believes that the man-made fibers can expand on this lesson and apply advanced texture technology to open many untried and profitable doors.

A REPORT on the NEW DIMENSIONS in YARNS





Growth through merit... Textured nylon yarns are blazing new paths by bringing out a refreshing series of potential qualities from the hitherto limited filament yarn. A wide horizon, a rich future lies before the entire field of textured, bulked yarns.

TEXTURED YARNS

NEW HORIZONS for the ENTIRE TEXTILE INDUSTRY

WHEN NYLON, the first of the chemical textile fibers was perfected several short years ago, it caused an immediate sensation. When utilized in the end products for which it was specifically designed, it performed with an unprecedented degree of superiority and efficiency. Considering this fact, it is not surprising that man, in his never-ending quest to find the one product that is omni-performing, was immediately intrigued with the nylon fiber's abilities to give superior performances in a variety of end uses.

Of course, during the early years of nylon's brief history as a textile fiber, total diversification of uses of the fiber was limited to the economic and social disorder wrought by World War II. Even at this time, however, there was much discussion about the role that nylon would play in textiles. Wash and Wear, suits that would never wear out, suits that could be laundered on the body, bed sheets that need never be ironed and would wear forever . . . and a thousand and one other wonders . . . were anticipated.

Enlarged Vistas for Nylon

Not all of these anticipations became realities; in many instances man's over-zealous nature overcame his better judgment. Some products first made with nylon left some things to be desired from a performance standpoint, but the point is that in almost every instance, it was due to man's inability properly *to adapt* the fiber for the specific end use.

It has often been said that necessity is the mother of invention and in the development of new end-use applications for nylon this has indeed been true. In recent years methods have been devised whereby a change in texture, and an increase in the bulk and stretch characteristics of nylon yarns can be obtained by putting a permanent crimp, loop, coil or curl into otherwise smooth, parallel, continuous filaments. Such yarns are known as textured yarns. They may be in either the *stretch, modified stretch* or *bulk* type.

TEXTURED YARNS offer one of the most promising areas for the future growth of the nylon market. Their development has already opened up an infinite number of new end uses for filament nylon in fields that were formerly dominated by spun yarns. For example: in rugs, carpets and fabrics with texture, hand and covering power normally associated with staple fibers. In many cases, the use of textured yarns in men's and women's hosiery, underwear and sweater lines enables manufacture of a uni-size item capable of fitting varying sizes of wearers.

Textured yarns are identified by a variety of trademarks; for example:

AGILON	Deering Milliken Research Corporation
FLUFLON	Marionette Mills, Inc.
HELANCA	Heberlein Patent Corporation
SAABA	Universal Winding Company
SPUNIZE	Spunize Company of America, Inc.
SUPERLOFT	Universal Winding Company
TASLAN	E. I. du Pont de Nemours & Company, Inc.
TEXTRALIZED	Joseph Bancroft & Sons Company
TYCORA	Textured Yarn Company, Inc.

These are produced by throwsters, yarn processors, knitters and weavers who usually operate under license from the owner of the particular texturing process involved.

Wide Variety of Uses

At the present time, textured nylon is being used extensively in knit goods such as sweaters, half-hose and socks. In addition to these end uses, its versatility creates unlimited possibilities in other areas: in woven fabrics, tricot fabrics and carpets. Recent market surveys indicate that the following items offer rapidly expanding new markets for textured nylon:

Automotive	Infants' Wear	Rugs, Carpets
Blouses	Intimate Apparel	Sheets
Decorative Fabrics	Lingerie	Slippers
Domestics	Men's Shirts	Sportswear
Girdles	Men's Underwear	Suits
Industrial Fabrics	Military Uses	Swim Suits
	Upholstery	

ALTHOUGH TODAY we note the success of textured yarns in connection with nylon fibers, methods of effecting changes in the surface characteristics of yarns (with the resultant changes in fabrics of these yarns) were actually in application prior

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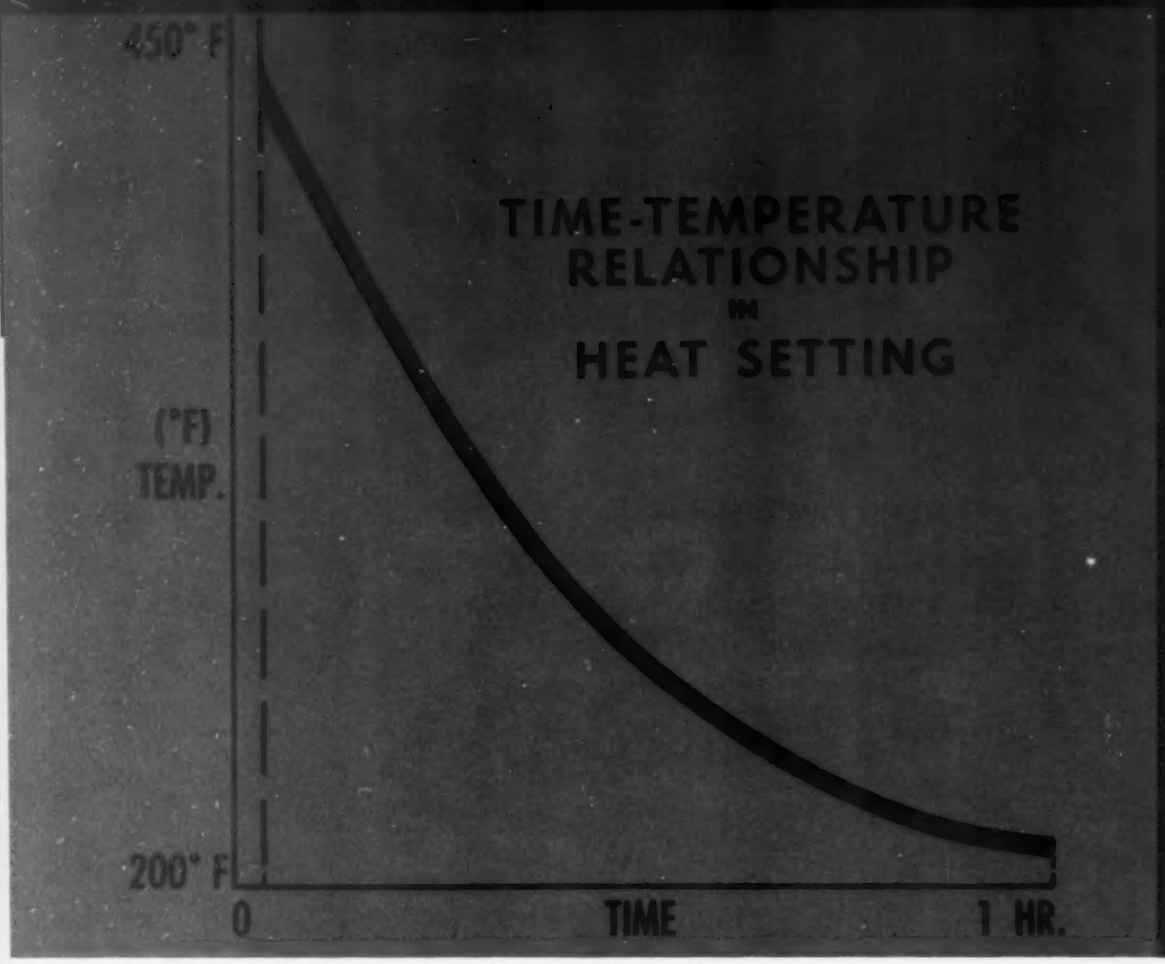
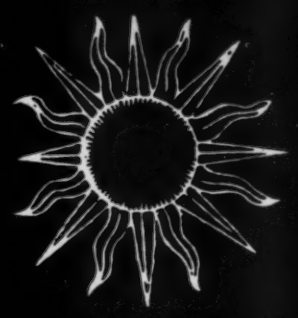




Nylon's high melting point makes it ideal for heat setting. The principle in heat setting is, *the higher the temperature, the shorter the time.*

to the advent of man-made fibers in the chemical textile industry. The appeal of those earlier fabrics made of fancy yarns was mainly, however, that of novelty rather than of any intrinsic and substantial properties of performance and/or aesthetic value. The result, therefore, was that early textured yarns did not produce fabrics of lasting commercial acceptance with a potential for wide growth.

The Sharp Upswing in Texture Interest

On the other hand, an ever-increasing poundage of nylon is being supplied to throwsters, yarn processors and weavers for texturing purposes. Twelve million (12,000,000) pounds of continuous filament nylon were modified into bulk and stretch yarn during 1956. Production and consumption jumped to twenty (20) million pounds in 1957 and to thirty (30) million pounds in 1958. By 1961, it is conservatively estimated, production and consumption will be in excess of fifty (50) million pounds per year.

Nylon as a polyamide fiber possesses pronounced thermoplastic properties which are highly suitable for heat-setting, which is essential to all but one of the commercially acceptable texturing processes in use today. The fiber has a high melting point which permits it to be heat-set. It has a proper fiber *memory*, or ability to revert to a set-in state after subsequent distortion. It has a comparatively low moisture regain (4.5%) a feature which also promotes rapid drying and minimizes swelling and weakening when wet. Nylon possesses the attributes of strength, toughness and abrasion resistance and is supplied in a wide range of deniers and filament sizes to suit all textile and industrial end use applications.

Beginnings of Successful Bulked Yarn

The first commercial bulked yarn introduced into the United States was Heberlein's Helanca around 1950-1951. Its original introduction had been in Switzerland in 1947 by Heberlein & Co., A.G. In addition to the amazing stretchability and give in this yarn, the Helanca nylon possessed a softness and luxurious hand. The stretchiness imparted a hug-ability and did not sag. The air present in the interstices which had been formed within the yarn created thermal insulation and warmth.

Here was a yarn which was not a passing fancy, as had been earlier textured or bulked yarns. It was not a temporary novelty. Its practical advantages, combined with the new aesthetic properties enabled it to find new markets which were not only permanent and clearly defined but also exclusive to the fiber. Heberlein's Helanca was the textured yarn which opened vistas and showed the way.

Helanca: first textured yarn of merit

Heberlein's Helanca made stretch socks possible and reaped a multitude of advantages even in this relatively limited end use. Because it eliminated the need for a wide range of sizes and required only sizes *Large* and *Small*, operating and inventory costs were minimized for manufacturers, wholesalers and retailers. Correct-size headaches vanished for the gift buyer; any recipient enjoyed all the inherent benefits of the yarn now apparent in the end product.

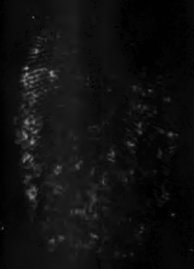
Advantages of Nylon Textured Yarns

Nylon possessed the basic and inherent attributes which offered the most promise for market potential and promised the most advantageous union in combination with the striking surface to textures and style possibilities available from textured yarns. Some of the advantages of fabrics knitted and woven from textured nylon yarns are:

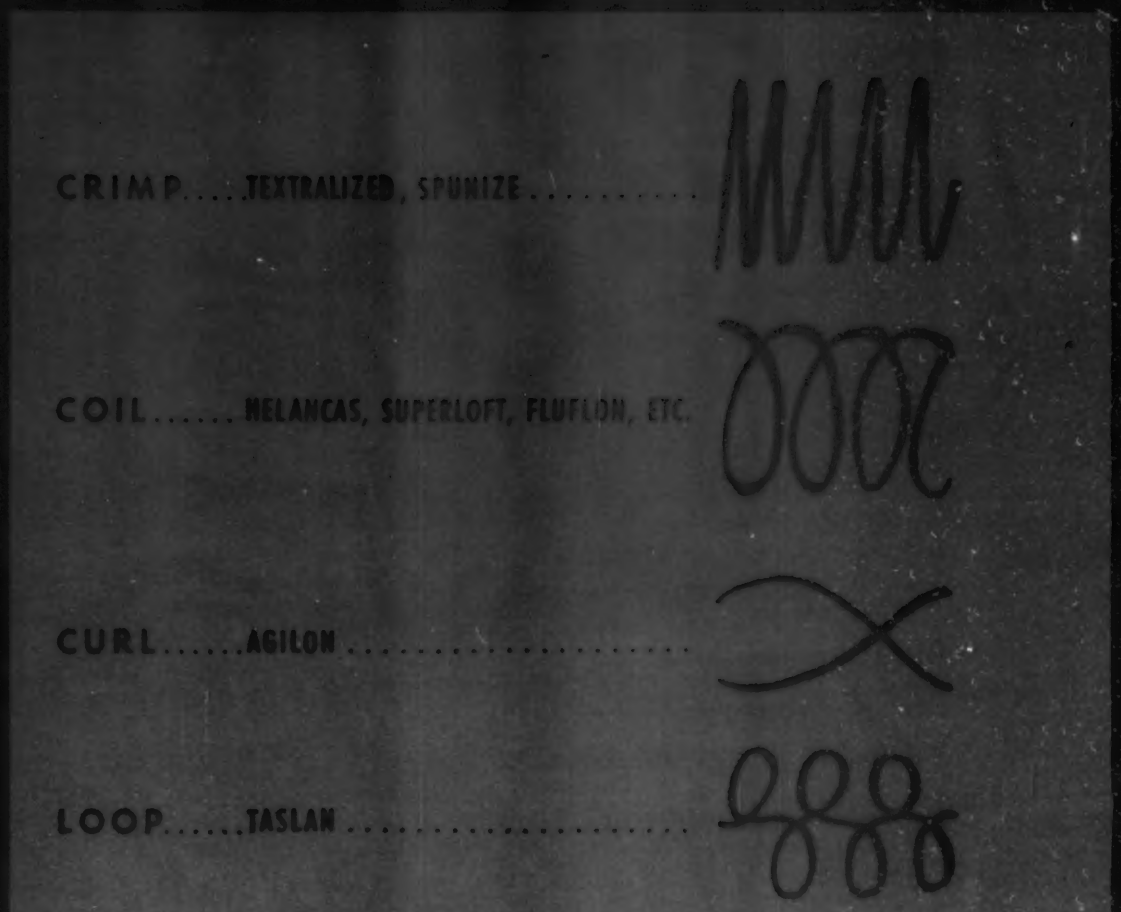
They simulate the characteristics of fabrics constructed from hi-bulk spun yarns and give certain additional plus values such as no-pilling and absence of broken filaments.

They combine the high abrasion resistance, strength and toughness of nylon with bulk, comfort, thermal insulation and satisfactory moisture absorption properties.

In many cases their use enables garment manufacturers



The four main types of textured yarns are diagram-illustrated alongside. The variations of each type may be quite numerous.



to produce a one-size item which fits several sizes of wearers.

Their texture can be varied from one of unusual softness to one of firm crispness depending on the method and conditions under which the nylon has been textured.

The fabrics are extremely durable. They are easy to wash and dry rapidly.

The fabrics do not felt and can be made dimensionally stable.

Fabrics woven and knitted from textured nylon yarns feel warmer than do fabrics constructed from regular nylon. This is because regular untextured nylon removes body heat faster than textured nylon due to its greater area of surface contact with the skin. Both laboratory and wear tests have shown that fabrics woven and knitted from textured yarns of nylon have similar surface characteristics to fabrics constructed from spun yarns, in that both type fabrics have a lower real area of contact with the skin.

Finally, fabrics knitted and woven from textured nylon yarns have tremendous versatility because of their ability to stretch . . . to bulk . . . to look like spun yarns . . . and to give warmth without undue weight.

The Five Steps in Texturizing Nylon

The *usual* process for texturizing nylon consists of a five-phase, high speed, continuous operation.

In *phase one*, the yarn is removed from the bobbin.

In *phase two*, the individual filaments of the yarn are displaced from their natural and relatively close-packed positions either by mechanical distortion (for example, twist) or by other means.

In *phase three*, the displaced filaments comprising the yarn are made to assume a permanent configuration, such as by heat-setting.

In *phase four*, the forces which caused filament displacement in phase two are removed (by untwisting, if the filaments have been displaced by twisting), so that the yarn assumes permanent bulk and/or stretch characteristics, particularly after relaxation.

In *phase five*, the textured yarn is wound on a suitable package.

The method and conditions under which the yarn is textured determine the type filament configuration. This configuration . . . be it curl, coil, or crimp . . . ultimately determines the bulk and/or stretch. Each category of textured yarns is typified by specific characteristics.

How Stretch and Bulk Yarns Differ

Bulk yarns, for example Spunized and Textralized, are continuous filament yarns which have been modified to give greatly increased mass or bulk per unit length. Bulk yarns exhibit varying degrees of stretch depending upon method and conditions under which the yarn is textured. However, the bulk is permanent, irrespective of whether the yarn is in a relaxed or extended condition.

Stretch yarns (Helanca, Superloft, and Agilon) are characterized by high elongation, rapid recovery and permanent crimp retentivity. Stretch yarns are used extensively in growth-type garments where stretch is of primary importance and bulk and coverage of secondary importance. In designing fabrics woven and knitted from stretch yarns, due allowance is necessarily made for the relaxation and increased yarn bulk when tension has been released.

Modified stretch yarns (Saaba, Helanca SS and Helanca SW) are stretch type yarns such as Helanca, Fluflon and Superloft which have been modified under controlled conditions of tension, temperature and heating-time to remove some of their stretch yet retain maximum bulk.

As might be expected there are certain basic differences in the stress-strain characteristics of typical bulk, stretch and modified stretch type yarns.

(continued)

How surface area increases through transformation from filament yarns and bulked yarns . . . (1) A demonstration cone of filament yarns is cut through with a sharp knife or razor and immediately (2) Releases the life inherent in the yarn by (3) Increasing its bulk and the surface areas

(continued)

Acilon

Several Years Ago it was realized that the tremendous future of stretch-type textured yarns was likely to be jeopardized unless an alternative method to the twist-heat set-untwist method could be developed. In consequence, methods involving the false-twist principle were developed which:

1. Reduced the number of operations enabling twisting-heat setting and untwisting to be carried out continuously in one operation on one machine
2. Speeded up the process
3. Eliminated unnecessary handling of the yarn
4. Enabled production from each spindle to be greatly increased both by virtue of the fact that a double pass is eliminated and also because it is possible to run small false-twist spindles at higher speeds than conventional spindles.

In the false-twist method, the continuous filament yarn is fed through a false-twist spindle on the uptwisting side of which it passes through a suitable heating device where the high twist is permanently set. The number of turns per inch to be given and the number of r.p.m.'s of the false-twist machine determine the rate of production. Of the yarn coming from the false-twist machine, one component having "S" twist is combined with a "Z" twist partner to give a balanced torqueless yarn, unless single ends are required for special purposes. Finally the yarn is coned and shipped.

A further classification of textured yarns takes in the stretch, non-torque type yarns:

Agilon is the registered trademark for a curl-type non-torque stretch yarn developed and patented by Deering Milliken Research Corporation. The Agilon process consists of running a continuous filament yarn through a heat zone and then around a knife edge, a procedure which deforms the filaments into a series of spirals and imparts elastic, voluminous, non-torque characteristics.

The process may be applied to both multifilament and monofilament yarn. In the latter case an almost perfect helix is obtained which reverses direction periodically.

A New Help to the Hosiery Field

Monofilament Agilon yarn has had commercial success in both seamless and fully fashioned stockings. It gives an elastic fabric which fits well, and has a pleasing mat appearance. Since Agilon is a non-torque yarn it can be knitted on single carrier machines. Agilon textured multifilament yarn is used in knitted outerwear, underwear, carpets and is now being developed for weaving.

Helanca NT is a no-torque stretch yarn which has been produced on false twist machines in such a manner as to alleviate the necessity of balancing "S" and "Z" torques in the final yarn or fabric. Helanca NT yarns may be woven or knit in the single form without fabric distortion. They are widely used in stockings and underwear.

Kandelaft: A woven sculptured Helanca fabric containing textured nylon and Lurex.

BRAUER KNITTING COMPANY: *(Right)* 100% nylon knitted Helanca fabric for couture swim suits.

SUEMEL KNITTING COMPANY: *(Far right)* A knitted nylon Helanca fabric for slim pants and bathing suits of checkerboard pattern.

HELANCA

Helanca stretch yarn produced by the batch-type, conventional method consists of the following basic operations:

1. Uptwisting on conventional twisting machines to between 45 and 125 turns per inch depending on denier and effect desired. (Sixty-five to seventy-five per turns per inch are common when processing 70 denier yarn)
2. Heat-setting in a pressure steam box at approximately 260° for one hour or less
3. Untwisting through zero
4. Doubling if required, coning, etc.

Through an agreement with the Heberlein Patent Corporation, the producers of false-twist type stretch yarns such as Fluflon and Superloft can procure the right to label their yarns with Heberlein's well recognized Helanca trademark.

Batch-Type versus False Twist

Whereas the conventional method for producing Helanca textured yarn is a batch type process, the false-twist methods for producing Helanca are continuous ones. Certain minor differences in hand exist between the two types, however, and articles made from conventional type Helanca show, as a rule, a slightly more pronounced crispness and firmness of hand than the same items fabricated from Helanca textured yarn produced by false-twist methods.

Helanca textured yarns, whether produced by conventional or false-twist methods, are characterized by a left- or right-hand torque depending on direction of the high twist. Torque can be neutralized and balanced yarns and fabrics obtained by:

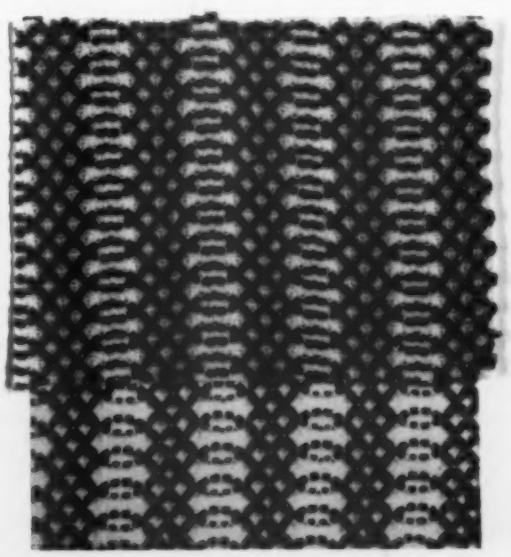
1. Plying yarns of opposite twist on a doubling frame. 2, 4 or 6 ply yarns are most common
2. Alternating yarns of opposite high-twist in the fabric
3. Special method of processing the yarn, as in Helanca NT.

Helanca textured yarns are widely used in:

Tights	Socks	Swim Suits	Woven and
Briefs	Stockings	Foot Protectors	knitted fabrics
Leotards	Gloves	Sweaters	Men's and women's
Slippers	Girdles	Dresses	underwear

The trademark Helanca Hi-Test is used to designate Helanca yarn with maximum stretch which complies with quality standards set by the Heberlein Patent Corporation.

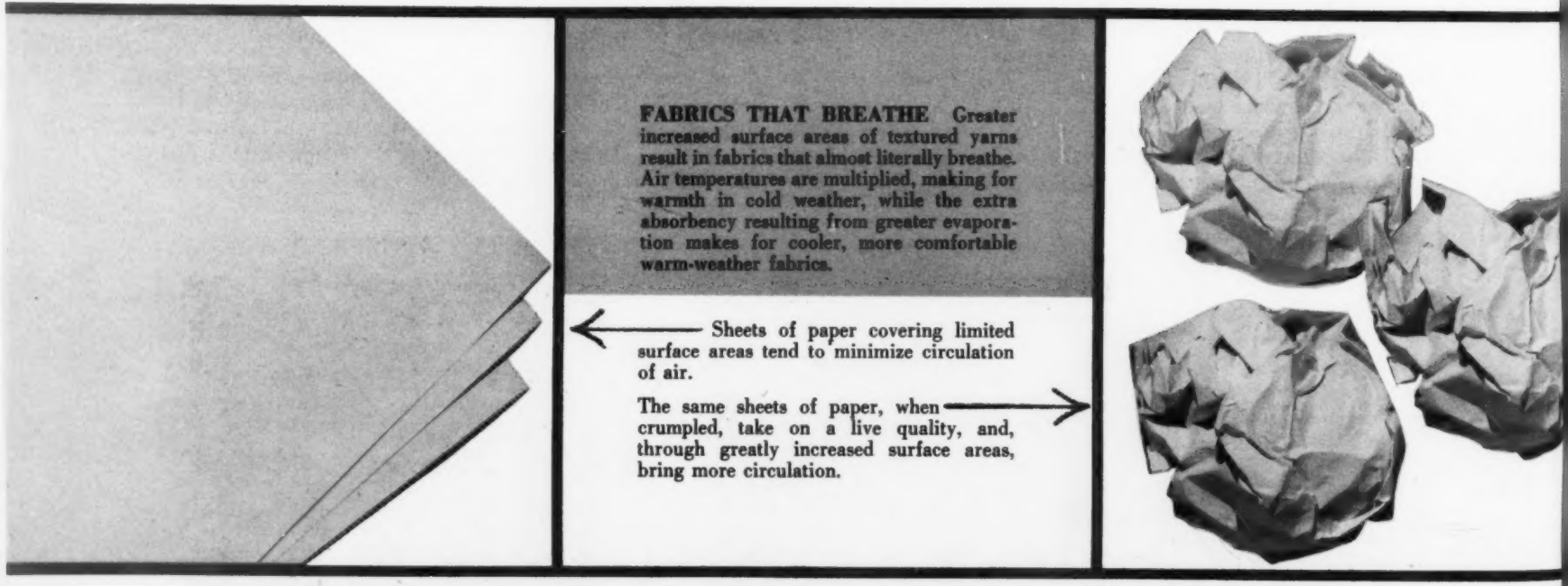
Helanca SA identifies a yarn of high elastic pull especially prepared for use as a warp yarn in the weaving of ski-pant-like material. Helanca SP is produced on conventional uptwisters by the twist-heat set-untwist method. *(continued)*



ACTION FABRICS: *(Right)* 100% nylon Helanca textured fabric for tight pants and bathing suits.

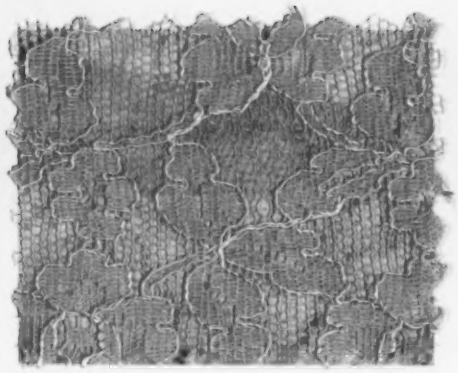
STRETCH FABRICS, INC.: *(Far right)* 100% Helanca textured fabric of a lace pattern for sportswear and bathing suits.

Textured, bulked yarns are bringing a fresh, progressive note into the textile field. The implications of this important trend are unmistakable and it is our conviction that the increased use of these yarns for the coming decade is a certainty.--THE EDITORS.


FABRICS THAT BREATHE Greater increased surface areas of textured yarns result in fabrics that almost literally breathe. Air temperatures are multiplied, making for warmth in cold weather, while the extra absorbency resulting from greater evaporation makes for cooler, more comfortable warm-weather fabrics.
Sheets of paper covering limited surface areas tend to minimize circulation of air.
The same sheets of paper, when crumpled, take on a live quality, and, through greatly increased surface areas, bring more circulation.

LaFrance Industries: Of 100% Textralized nylon face with cotton and viscose rayon backing.

Cadillac Textiles: A Ban-Lon screen-printed woven surah of 100% Textralized nylon.



North American Lace: A Ban-Lon Leavers-lace containing Textralized and filament nylon.

(continued)

Textralized

Ban-Lon and Textralized are registered trademarks for end products and continuous filament yarns modified by a process licensed by Joseph Bancroft & Sons Company to certain qualified licensees.

These constitute a crimped type of bulk yarn. Recently certain sizes of Ban-Lon yarn were changed to the designation Textralized. There are five steps involved in the conversion of straight continuous filament yarn into Textralized yarn. These are as follows:

1. CRIMPING. The yarn is crimped on a cone winder equipped with a special crimping unit. The crimping unit consists of two (2) feed rolls and a brass-tube stuffer box. By compressing the yarn into the stuffer box, the individual filaments are caused to fold or bend at a sharp angle. This crimps them. The yarn is simultaneously heat-set during compression by an electric heating element around the stuffer box.
2. CLEANING. The yarn emerging from the stuffer box is cleaned of broken filaments and similar imperfections.
3. OILING. A lubricating oil is applied to the yarn both after cleaning and in the final coning operation. This ensures uniform and low tensions in the yarn during subsequent processing and fabrication steps.
4. PLY TWISTING. Although the type nylon most commonly used for Textralized yarn (as with most other type textured yarns) is 70/34/SD, other yarn ranging from 30 to 200 denier find practical use. Textralized yarns are often plied (usually 2 to 5 plies) to increase total yarn weight, hold the individual filaments together, and minimize filament breakage and snagging. Plying is usually carried out on a doubler frame.
5. FINISH WINDING. The Textralized yarn is lubricated and wound on cones in preparation for weaving and knitting.

Uniform yarn tensions are mandatory throughout the entire Textralizing operation. Also, all yarn guides and contact surfaces should be smooth. The crimp in Textralized textured yarn does not fully develop until the yarn has been allowed to relax. This relaxation is carried out by scouring at 80 to 90°F followed by extraction and tumble drying at 160°F.

Other Textures Differ in Character

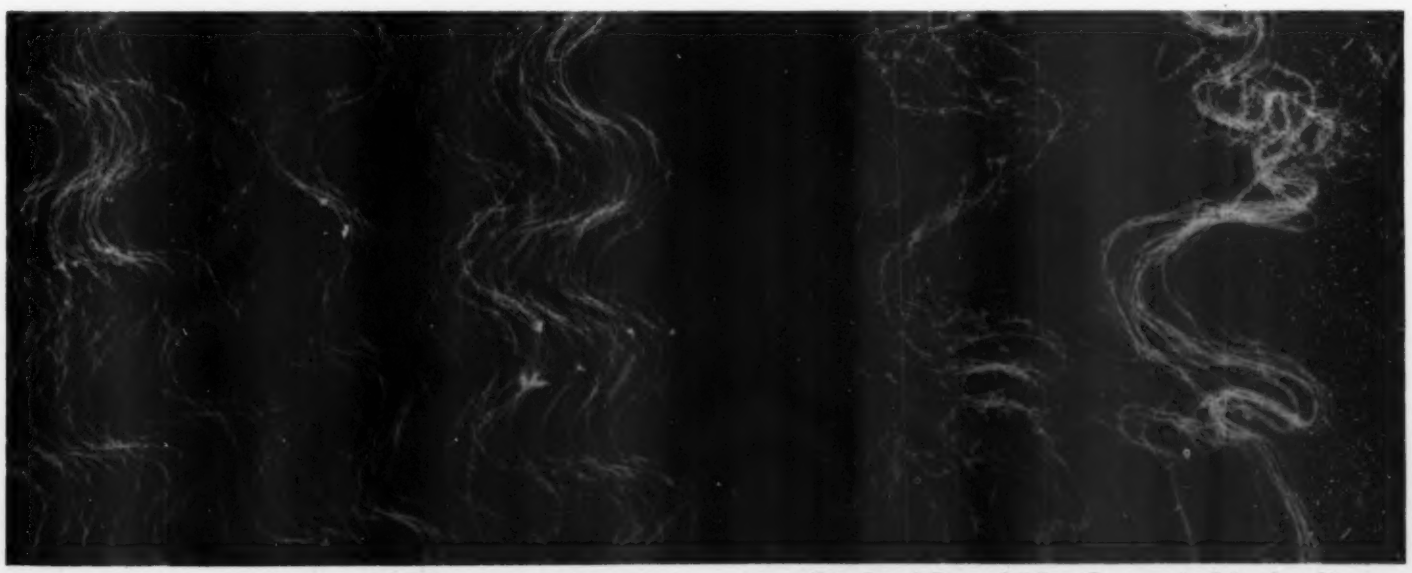
Textralized textured yarn is characterized by a wavy irregular zig-zag crimp which gives the yarn:

— Its soft bulky hand
— Added volume in the range 200% to 300%
— Sufficient elasticity to provide a snug fit in a garment form
— Increased moisture absorption for wearing comfort.

Several end uses for Textralized yarn include:

Men's, women's and children's sweaters and sports shirts
Men's and women's underwear
Girdles and brassieres
Half hose, leotards
Woven and knitted fabrics for lingerie, blouses, dresses and uniforms

(continued)



The natural crimp in expensive wool, above illustrated, was the starting point of an important phase of textured development in the U.S.A. Back in 1947 Lee Rainard, of the Alexander Smith Carpet Company, now with the Joseph Bancroft & Sons Co., conceived the idea of increasing the degree of the crimp of South American wools. These early experiments in the carpet field led to many fruitful developments.

Names Everyone Should Know in the Area of Textured Yarns:

ONE OF THE MOST SIGNIFICANT aspects of the textured-yarn picture is the fact that some of America's greatest man-made yarn producers are in the field with both feet; Bemberg with Cupioni, Celanese with Celaloft; Allied Chemical, Chemstrand, Du Pont, and American Enka with nylon; U. S. Rubber with its twist-set yarns. These organizations are in a position to not only assist with research and merchandising facilities but also to provide a stabilizing element for the textured-yarn picture. These firms can and will contribute greatly, along with the pioneering leaders below, to make more cheerful textile history for the period ahead.

AGILON is the trademarked property of the Deering Milliken Research Corporation.

HELANCA, the first truly successful process for texturizing nylon, belongs to the Heberlein Patent Corporation.

SAABA is a name coined by the Universal Winding Corporation.

SPUNIZE is owned by the Spunize Corporation of America, Inc.

SUPERLOFT is another name owned by the Universal Winding Co.

TASLAN covers the texturizing of both natural and manmade fibers, and is a Du Pont product.

TEXTRALIZED denotes the texturizing process owned by Joseph Bancroft & Sons Co.

TYCORA is a name coined and owned by the Textured Yarn Co., Inc.

* * *

While currently the preponderance of all textured yarns are held within the confines of nylon, it is inevitable that those more closely concerned with the future of other fibers . . . both natural and manmade . . . must follow this same pattern of texturization. In coming issues AMERICAN FABRICS will publish feature editorial stories which will indicate how texturization can multiply the appeal and the sales for otherwise tiring fibers of all kinds.

(continued)

SAABA

THE SAABA PROCESS, which produces stretch yarns but of the modified type, is an additional operation whereby Superloft or Fluflon false-twist type stretch yarn is modified under controlled conditions of tension, temperature and heating time to remove some of the stretch yet retain maximum bulk (if desired) on the number 511 Thermal Attachment manufactured by Universal Winding Company designed for application to the Leesona Model 10 Ring Twister of the Heberlein Patent Corporation. Processing conditions can be varied to remove any desired amount of stretch. Fabric surface effects range from a smooth to a crepe-like texture depending on the yarn processing conditions.

End uses for Saaba yarn include: Knitted outerwear, swim wear, underwear, hosiery, and girdles; warp knit fabrics; flat-woven and pile fabrics; industrial fabrics, webbings and braids.

SPUNIZE

THE SPUNIZE PROCESS of the Spunize Company of America, Inc. utilizes the stuffer box technique to induce crimp in the yarn. Through the use of special attachments, the Spunize process is able to provide maximum bulk where required or alternately inhibit bulk as required for certain end uses. The process involved consists of simultaneously crimping a large number of ends in warp fashion followed by heat-setting in an autoclave. Alternatively, the crimped ends can be heat set and dyed simultaneously in a pressure dye kettle before being separated and wound on to bobbins or warp beams.

Fabrics constructed from Spunized textured yarn are characterized by a smooth and bulky surface texture.

Spunized textured yarn is expected to have important end use applications in the heavier deniers for rugs, carpets and upholstery fabrics. Good results are now being experienced in the finer deniers for weaving, tricot and regular knitting purposes.

Advantages of Textured Yarns in Fabrics

1. COMFORT . . . . . Warmth without weight Increase absorbency and wicking action

2. NON-PILLING . . . . All the good properties of staple yarns without pilling

3. DYEABILITY . . . . . Greater acceptance for dyestuffs

4. WIDE RANGE OF DESIGN . . . . . Stretch —— to —— Bulk with any desired degree of surface textural characteristics.

Twist Methods: Superloft and Fluflon

Two of the most important false-twist methods for the production of stretch yarn at the present time are the Superloft and the Fluflon processes.

Superloft textured yarn, the registered trademark of the Universal Winding Company, may be produced on (a) the number 550 Superloft machine; (b) the number 551 Superloft machine recently released for sale by Universal Winding Company, or (c) the number 552 Superloft machine also recently released for sale by Universal Winding Company.

A 216 spindle Superloft machine will replace approximately 1000 conventional spindles. It does this by reducing to a single continuous operation all of the steps previously necessary for the production of stretch yarn by the conventional method.

One high-speed continuous operation takes the thermoplastic yarn from the supply package . . .twists it . . . permanently heat sets the twisted yarn . . . untwists it . . . and takes the stretch yarn up on packages ready for further processing.

Superloft textured yarn is used in similar applications to conventional twist-heat set-untwist stretch yarns although somewhat greater diversification is possible.

Fluflon false-twist type stretch yarn is produced on conventional uptwisters fitted with the Fluflon Attachment Model 994 manufactured by Universal Winding Company.

End uses for Fluflon textured yarn are, in turn, similar to those for Superloft.

In general, the characteristics of nylon textured by false-twist processes such as Fluflon and Superloft are:

The yarn is of the stretch type
Elongations range from 300% to 400%
Increased diameter of the relaxed yarn causes a bulk decrease of about 300%.

The Great Variation in Possibilities

The yarn is often softer, and gives a smoother and more uniform texture than yarn textured on conventional spindles. However, the texture of the fabrics can vary from a rough terry effect to an even crimp texture depending on processing variables.

Any difference between Fluflon and Superloft textured yarn is probably due to the different heat-setting techniques and different type feeds used in the two processes, viz: Radiant heat setting and constant tension for Fluflon compared with direct-contact heat setting and constant supply rate for Superloft.

Yarn textured by false-twist methods has residual twist or torque liveliness and if used in this form gives, for example, spiral knitted fabric. For this reason, it is usually plied with another yarn of opposite twist or knitted in alternate courses or bands of courses with yarn of opposite twist.

The three main processing variables which effect both the appearance and physical properties of nylon textured by false-twist methods are:

1. The amount of false twist
2. Heat-setting temperature
3. Degree of tension.

Taslan

The process for producing Du Pont's Taslan textured yarn consists of feeding a yarn through the turbulent region of an air jet at a rate faster than it is drawn off by take-up rolls on the far side of the jet. In the jet, the yarn structure is opened, loops are formed, and the structure is closed again. The texturing process locks some of the loops inside and leaves others on the surface of the yarn. As in most textile operations, several different types of equipment are capable of accomplishing the job; there would therefore be several different yarn path possibilities.

The denier of the resultant Taslan yarn is higher than that on the supply package, and the amount of increase can be controlled by adjusting the relationship between feed and take-off speeds.

Although the yarn is only 15% to 20% shorter after bulking, it normally increases from 50% to 100% in volume. The covering power of fabric knitted or woven from Taslan textured yarn is usually 75% to 100% greater than that of untextured fabric.

Taslan textured yarn does not stretch, the chemical properties remain unchanged, and the looped structure is capable of bearing the tension normally associated with the usual textile processing operations.

Fabrics of Taslan textured yarns are used in:

Upholstery	Shirtings
Sewing thread	Blouse and Dress goods
Carpets	Men's and women's outerwear

(continued)

Wide Horizons in End Uses of Textured Yarns

OUTERWEAR---- Blouses, Dresses, Sportshirts, Sweaters, Gloves, Ties

SHOES---------Casuals, Rainwear, Streetwear

SWIMWEAR-----All Types

UNDERWEAR--- Panties, Bras, Girdles, Corset Paneling, Shorts, Slips

HOSIERY------- High Rise, F.F., Seamless, Half Hose, Athletic Hose

LACES---------Levers, Schiffli, Raschel

LEOTARDS------ Ballet, Casual Streetwear

MILITARY------ Apparel, Coated Tarps, Underwear, Other

UPHOLSTERY---Drapes, Furniture, Auto

Glossary of Pertinent Terms Applicable to Textured Yarns

BAN-LON: Registered trademark owned by Joseph Bancroft & Sons Company and applicable only to fabrics and garments approved by that company.

BLOOMING: Normally applied to the ability of a textured yarn to bulk after it is in the fabric. This implies that textured yarns may be held in restraint in certain fabric constructions, thereby preventing full blooming of the yarn.

BULK INDEX: The degree to which a textured yarn will bulk during normal wet processing. Bulking is associated with the Three "C" 's . . . coiled yarns, crimped yarns and curled yarns . . . and not with looped textured yarns. The bulk in looped yarn is effected during looping by the introduction of randomly spaced loops into individual filaments of the yarn — this has nothing to do with wet processing.

COILED YARN: A textured yarn in which the deformation is a continuous coil in each of the filaments of the yarn.

CONVENTIONAL HELANCA: Coiled yarn made by the three-step process: twist, heat-set, untwist.

CRIMPED YARN: A textured yarn in which the deformation is a series of alternate sharp elbows and arms.

CURLED YARN: A textured yarn in which the deformation is a curl similar to that noted in a Christmas ribbon when it has been drawn over a sharp edge. This deformation is the result of stresses on a sector of the filament cross section.

FALSE TWISTING: A method by which a yarn is twisted, heat-set and untwisted in one operation. At no given instant can it be said that real twist exists in the yarn. Therefore the name False-Twist.

HEAT-SETTING: A phenomenon peculiar to thermoplastic fibers in the re-orientation and alignment of the long chain molecules by the application of outside energy in heat form.

MODULUS: The ratio of increase in load to increase in elongation.

STRETCH YARN: One which has a pronounced degree of extensibility and rapid recovery; for example, Conventional Helanca, because it has a much greater modulus than other commonly known textured yarns.

TEXTURED YARN: Any filament yarn modified in such a way that its physical and surface properties have been changed. The term principally implies that a different texture has been imposed on the yarn that will in turn manifest itself in fabrics made of such yarns.

TYCORA

The registered trademark TYCORA is used to identify textured yarns produced by the Textured Yarn Company, Inc. of Philadelphia and its foreign licensees. Since the trademark Tycora is used to designate textured yarns processed under several techniques and controlled by Textured Yarn Company, Inc. Tycora symbolizes a source of manufacture and not a method of manufacture. Individual characteristics of Tycora textured yarn depend on the processing technique involved.

Tycora textured yarns are found in all forms of knit products, including sweaters, swim suits, gloves and hosiery; carpets, upholstery and draperies.

A Bright Decade Ahead

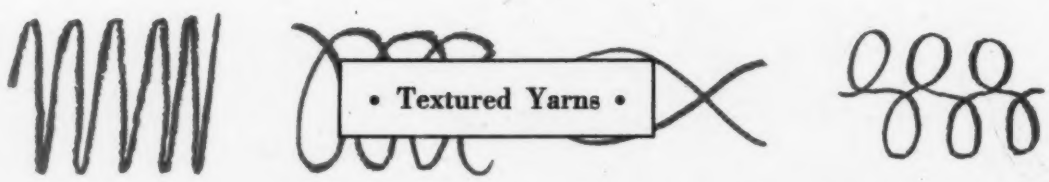
Striking surface textures are continuing to pace the use of textured yarns in high fashion end uses while utilitarian attributes are finding more and more bread-and-butter applications.

It is naturally expected that as new end uses in the various textured yarns come into being, the curve of their growth will probably accelerate at more than a normal speed and peak at above their plateau before settling down to where they belong . . . all due to their optimistic forecasts which are not without reason.

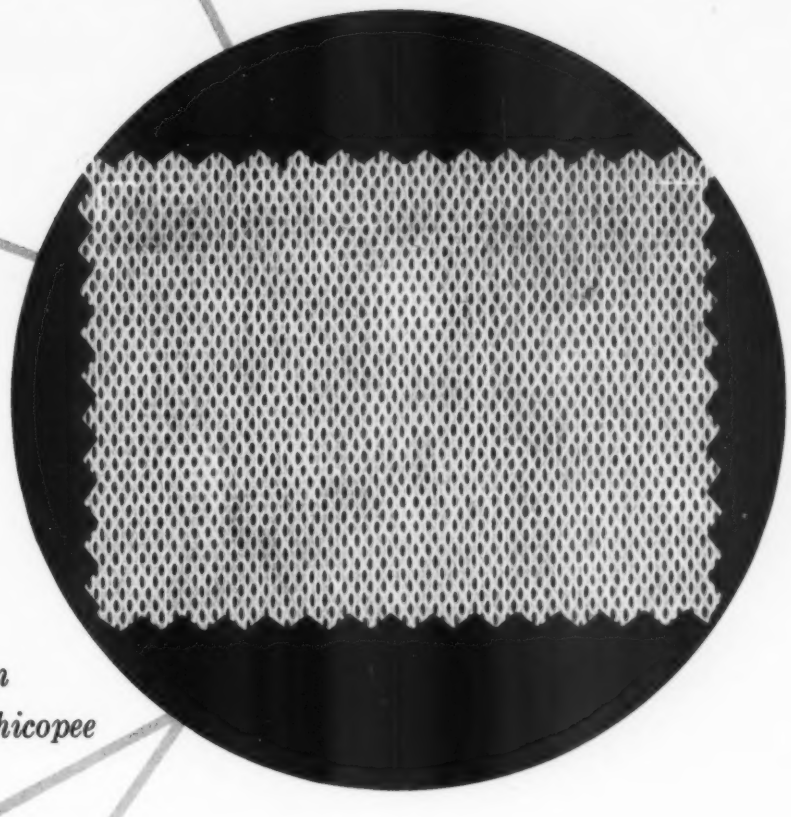
However, as individual end uses come in, climb and then peak off, other end uses will be started and assume their own climb before the previous end uses peak. In other words, growth potential and end use applications which the future tends to hold for textured nylon filament yarns, at this part of their development, appear to offer an open end.

In Conclusion:

The potential market for textured filament nylon yarns as has been noted throughout the preceding pages is a tremendous one. A brief scanning of the companies actively and extensively engaged in texturizing should indicate the tremendous importance of this trend. We foresee, further, that other fibers and their producers will not long sit idly by. It well may be that within this very decade much of the face of textiles, (and textile business) will be changed for an active betterment . . . by the advent of textured yarns.



KEYBAK



the conquest of INNER SPACE

is accomplished by the first porous nonwoven interfacing made of Rayon-and-Nylon by Chicopee

KEYBAK'S DOZEN CHARACTERISTICS

1. Permanent Finish
2. Resilient and Crease Resistant
3. Good Biasability
4. Good Shaping Qualities
5. Washable and Dry-Cleanable
6. Quick Drying
7. Non-Ravelling
8. Smooth Surfaces
9. Sews, Cuts and Handles well
10. Good Color
11. Non-Yellowing
12. Range of Weights

BEFORE KEYBAK, all available interfacings were of the solid type, and lacked breathability. While this was an advantage in many instances, it was also a disadvantage in others. The fabric had insufficient pliability and needleability for the machine operator to produce with maximum efficiency; and since the cost of labor is today the highest single factor in apparel production, it is understandable that manufacturers would welcome any new development which would bring down that cost.

Chicopee Mills did it with Keybak, a porous nonwoven interfacing. A skilfully arrived at blend of rayon and Du Pont nylon forms the base; the big trick was to produce it into a nonwoven fabric with all the advantages this blend had to offer, *plus* greater breathability. The answer, as the reader can tell by fingering the swatch on this page, was in the special patented process of making the fabric porous. This also made the interfacing lighter in allover weight, without sacrificing any of its firmness . . . and gave it greater flexibility in meeting the needs of different manufacturing fields.

American designers have been quick to appreciate the potential of this porous, cool facing and such names as *Hannah Troy, Pauline Trigere, Adele Simpson, David Kidd* at *Arthur Jablow, Larry Aldrich, David Crystal, Gaston Mallet, Arnold Scaasi and Herbert Sondheim* are already experimenting with this newsmaking fabric.

The fabric is completely washable, shrinkproof and, in fact, everything-proof when it comes to avoiding hazards and pitfalls. At present it is available in both white and black; plans are in work to broaden the color-range to include pastels.

Suzanne Godart in her Lanvin-Castillo dress of layers of white net in hundreds of yards, accented by garnet velvet sash and rose.

PORTRAIT of a CHILDREN'S DESIGNER:

Pink party dress of silk organza. (Peter Fink photo)

Suzanne Godart

She speaks English with no trace of an accent . . . yet she is as French as l'Etoile and foie gras. She brings her own charm and standards of perfection to her design board for children. And she believes that America's diversification of fabrics and finishes is superior to that of anywhere else in the world.

We refer to Suzanne Godart, who designs the entire line for Suzy Brooks, Inc. . . . a company which covers the entire range from toddlers through teens. Suzanne Godart got her basic training from Lily Daché, whom she admires and respects. To her, Lily Daché is a unique woman combining basic femininity with the capacity to work ceaselessly in order to achieve self-imposed standards of perfection. But from her mother, a cultured woman, Suzanne Godart received a sound foundation in good taste; the necessary springboard for creativity in the designing field. Because she herself is crazy about clothes (she goes to Paris twice a year for her clothes) and because she would be bored to be idle, Suzanne Godart went into business. This came about when Eleanor Lambert saw and liked the clothes that were designed for Suzanne's niece, and Eleanor suggested she enter the children's field.

After an initial disastrous business experience . . . an inevitable christening for many . . . Miss Godart found stability; stability aided by a well-defined point of view about how to design for children. She does not believe a child should dress like her mother because generally it ends up with both of them looking ridiculous. She caters to the child's wish to conform to the milieu of which she is a part. No child likes to be individualistic because it makes her too conspicuous. Every child likes to be a carbon copy of her neighbor; the basic psychology of conformism.

This is also the reason why Miss Godart is against high-fashion colors for children. In the spring season, she uses pastels; in the winter, she likes vibrant reds and blues as the most becoming colors for children. Unlike their mothers' fashions, the fashion pendulum for children swings very slowly.

Miss Godart understands very clearly what demands mothers make in the area of ease-of-care. She works chiefly in washable fabrics; here and there she uses silk organza or velveteen which require dry cleaning. Today the mother wants to dump everything into the Bendix; she is interested in fabrics that require at the most a touch-up job in ironing. Wash and wear fabrics are the second requirement . . . *after cute styling.*

Each age group interests Miss Godart and she tries to fill the need of each, from the self-conscious 8 to 12 group who shy away from anything too fancy to the toddlers who can take the deft French Touch she has. Miss Godart is noted for the adaptation of the tailored shirtwaist classics; for children she brings a fresh face with different fabrics and different accents like embroidery on the sleeves. Her young fry customers love the tunics, the popovers and the smocks which highlight her line. She brings zest and verve to her work . . . as she does to her life, which is full of interest, study and challenge.

Rosemary Sheehan

In the New York telephone directory Rosemary M. Sheehan is listed as a publicist. We prefer to call her a *catalytic agent* . . . the mysterious element which binds otherwise unproductive molecules to the point where something positive happens. And we also feel that her primary objective, as exemplified by the kind of work she has done in the textile industry, has always been pointed to the one objective of *sales.*

Study, if you will, the thorough and excitement-creating job she organized and directed for Galey & Lord a few winters ago. The basic elements were to hand in their line of resort cottons; but once Miss Sheehan put her hand to the task, sparks (and sales) began to fly. She made a tie-in with Sophie of Saks-Fifth Avenue, and then with other stores in the country. Special dresses were designed of these fabrics; they were ultimately shown on models in six cities (and the consumer paid four dollars for the privilege of seeing them at a luncheon) and then on the full network of CBS-TV. Even at the last level, in retailing, the impact was felt.

Rosemary has successfully staged promotions for such varied textile interests as the Swiss embroiderers (soon to be followed by a promotion to revive popularity of the dainty Swiss lace handkerchief); the Irish Linen Guild, which brought to this country talents such as Sybil Connolly, Donald Davies and Nellie Mulcahy. Even in the field of children's wear she has staged sound promotions for Kate Greenaway. And in other corners she has made her mark on hosiery and in the rebirth of the popularity of chinchilla among fashion-conscious women.

When Rosemary Sheehan picks up the phone and suggests that an important fashion editor fly with her to England or anyplace else, the main question is: when? For the fashion press has learned by now that if Rosemary Sheehan says there's a good story, the chances are that it will turn out to be an excellent one.

She has a flair for picking the things which have a chance to succeed, if well promoted; she knows how to promote; and she has the confidence and cooperation of press people everywhere. Above all, she has an eye for sales, she appreciates that a fat scrapbook is fine, but sales make the business world turn.

Next to Fashion
she has a Passion
for Collecting Angels

THE ORIGIN OF LAWN

A Berkshire Hathaway lawn with easy care benefits.

THE WEAVER'S WIFE OF LAON

MANY FABRICS are not only essentially beautiful and practical but have origins that are as romantic as a love story. There is Lawn, for example, which has been worn for over four centuries by those who appreciate its uniquely soft and smooth quality.

Lawn's long history stretches back to the 15th Century when the cloth was first woven in the Northern French town of Laon, near Paris. Laon was for centuries a battleground as the various tides of invasion swept through Northern France. Eventually many weavers settled there and the town became well known for its textiles during the eleventh and twelfth centuries.

The legend of Lawn starts, as do most legends, with a man and a woman. In the shadow of the Laon cathedral there lived a weaver who had a very beautiful wife. One day the story goes, a Viscount and his lady stopped on their way to Paris. All the rooms at the local inn were cleared and the entire establishment was put at the service of the visiting lord.

The weaver's wife was called to serve as maid to the viscountess. For the period of the three days visit the weaver saw little of his wife. Fascinated by the viscountess and her marvelous clothes, she would return briefly in the evenings to tell her husband of the great lady's magnificent clothes. How she wished to own something comparable to them! When the noble pair left, the viscountess gave the weaver's wife many presents, among which was a handkerchief of sheer silk.

The weaver's wife was in a daze for weeks. She would hold the silk handkerchief and weep. She wanted garments of silk. Why should she suffer to wear coarse clothes for the rest of her life? If she could only have a chemise, a negligee of the same soft silk as the viscountess wore, her life would be happy. Finally she told her husband that she was going to Paris to realize her wish.

Now the young weaver loved his wife very much. He asked her if she would wait for three weeks. The wife agreed. Working furiously day and night the weaver closeted himself in his shop; he hardly ate or slept. At the end of the time, as his wife was finishing her packing, he beckoned her into the weaving room.

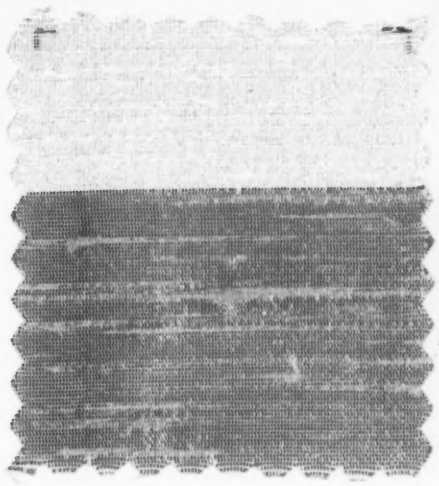
The weaver had spent his time creating a soft, sheer cotton fabric of incredibly fine weave. Because it was first woven in Laon, it took its name from that small French town. And, of course, the couple and the fabric, Lawn, lived happily ever after.

* * * * *

During the following centuries the manufacture of Lawn spread to other centers, to other countries. Today, Lawn, a great and basic favorite, is made from cotton, linen and some even have the new man-made fibers. A number of top houses produce it including Berkshire Hathaway, who have an entire line of Lawn. The line is composed of a series of flower, fruit and geometric prints.

Lawn is light in weight, sheer, soft, washable, and of simple weave. Lawn can be dyed, finished and blended in many combinations, giving the fabric wide use and tremendous versatility. When given various finishes, Lawn is known as batiste, chiffonette, organdy, nainsook, etc.

Lawn is found today in underwear, blouses, dresses, pajamas, curtains, lingerie, collars, cuffs, infants' wear, shirting, handkerchiefs and scarfs. Wherever it is used it wins friends for the same reason that first won the affection of the weaver's wife of Laon.



In drapery fabrics, Seneca offers an unusual blend of Ondulé rayon and Dacron polyester fiber. This results in a smooth, silky alternate stripe effect with a nubby surface.

RAYON finds still another avenue of ACCEPTANCE

Synchronizing with a major Fashion Trend, Du Pont emphasizes Ondulé as a Fiber which lends Texture

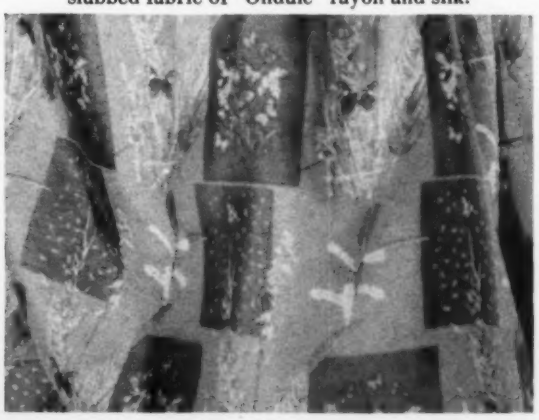
As Far as Three Years Back the Fabric Development Division of Du Pont spotted the first trend toward fibers and fabrics with surface texture. Keeping a watchful eye on this trend in both Europe and America, Du Pont proved to have a winner when it developed its new Ondulé. It is a random slubbed yarn made of rayon; but the quick acceptance of Ondulé by some of the best couture houses in Paris reminds us of the swift transition cotton made from the world of aprons to the stratosphere of the Pauline Trigeres.

Early in 1958 Ondulé made its first commercial appearance in fine dresses, sportswear, women's suitings and home furnishings. Its contribution to rich texture, good drape and both hand- and eye-appeal was recognized quickly, as evidenced by the broad manner in which Ondulé took part in the recent Paris showings of spring and summer fashions. For instance, couturieres like Guy Laroche and Chanel featured dresses made of a fabric with a silk warp and an Ondulé filling, produced by the famed Hurel mills. At the same time, on this side of the ocean, a number of high-fashion firms are showing and selling creations made of fabrics which combine Ondulé with cotton, acetate, Dacron, nylon, in addition to the silk-and-Ondulé blends.

What makes this fiber interesting, aside from its perfect timing to keep pace with the trend to textured fibers, is the manner in which the slubs are spaced: in addition to the random spacing, Ondulé gains character from the fact that the *size* of the slubs is also random; naturally, because this characteristic lends added desirability, designers were quick to take to Ondulé as the solution to the problem of texture patterning.

Spurred by the new collection, the interest in this yarn has resulted in a demand which exceeded supply during the last six months. Nor did this demand come from the women's fashion industry alone; in fact, it is anticipated that by 1960 the use of Ondulé will have spread widely beyond the fields of draperies, casement curtains, pillow covers, and women's fashions to men's sport shirts and even neckties!

Guy Laroche chose a strong red print on a slubbed fabric of "Ondulé" rayon and silk.



The ties above with the exception of the houndstooth design (second from left) are from the collection of Pierre Cardin. Each is a good example of unusual texture, weave and design.

India Madras checks, plaids and stripes are a continuing fashion favorite at Palm Beach this season.

The Neckwear Technique in Styling

The three generations which have built Jacobson Fabrics: founder Herman Jacobson at extreme right, William Jacobson in center and his son Richard at the left.

Through three generations it has helped a company to become a leading provider of sportswear fabrics . . . and still retain its position in neckwear!

IT IS ALMOST AXIOMATIC in the retail business that when the store needs traffic badly . . . it puts in a window of new men's neckwear. *And it works!* No matter how many ties a man has hanging in his closet, something makes it irresistible for him to walk by a neckwear window without entering the store. And the explanation is something the entire textile design field should learn and apply to *all* fabrics.

Knowing that a necktie is only two inches wide and that generally less than a half-dozen inches in length are exposed, the necktie fabric converter packs the greatest design and color impact he can into that small area. Whether the fashion trend is toward small figures, striped repps, or (as during the war) to extravagant splashes, the designer always keeps foremost the problem of *selling the tie* in that small visible area. Obviously this calls for a certain understanding of color and design; it also entails the ability to compose a harmonious whole and ensembl-ability.

This is an objective toward which all designers might well aim: how to pack a compelling appeal through color and design and weave, into a small area. Possessing this ability, the firm of Jacobson Fabrics in New York started as a company engaged solely in the converting and importing of neckwear fabrics. That was in the year 1896, when Mr. Herman Jacobson founded the company. Today Jacobson is a valued fabric source for many of the top echelon makers of men's sportswear and sports clothing as well . . . and again, because there is something eye-catching about tie-fabric designs, colorings and weaves. The fabrics run the entire range among the natural fibers: silks, cotton, wools and blends of all three. But as one turns blanket after blanket, it is impossible not to pick up the spirit of the line . . . and this again reverts to the basic philosophy of styling the goods as though it must sell itself in six-inches-by-two.

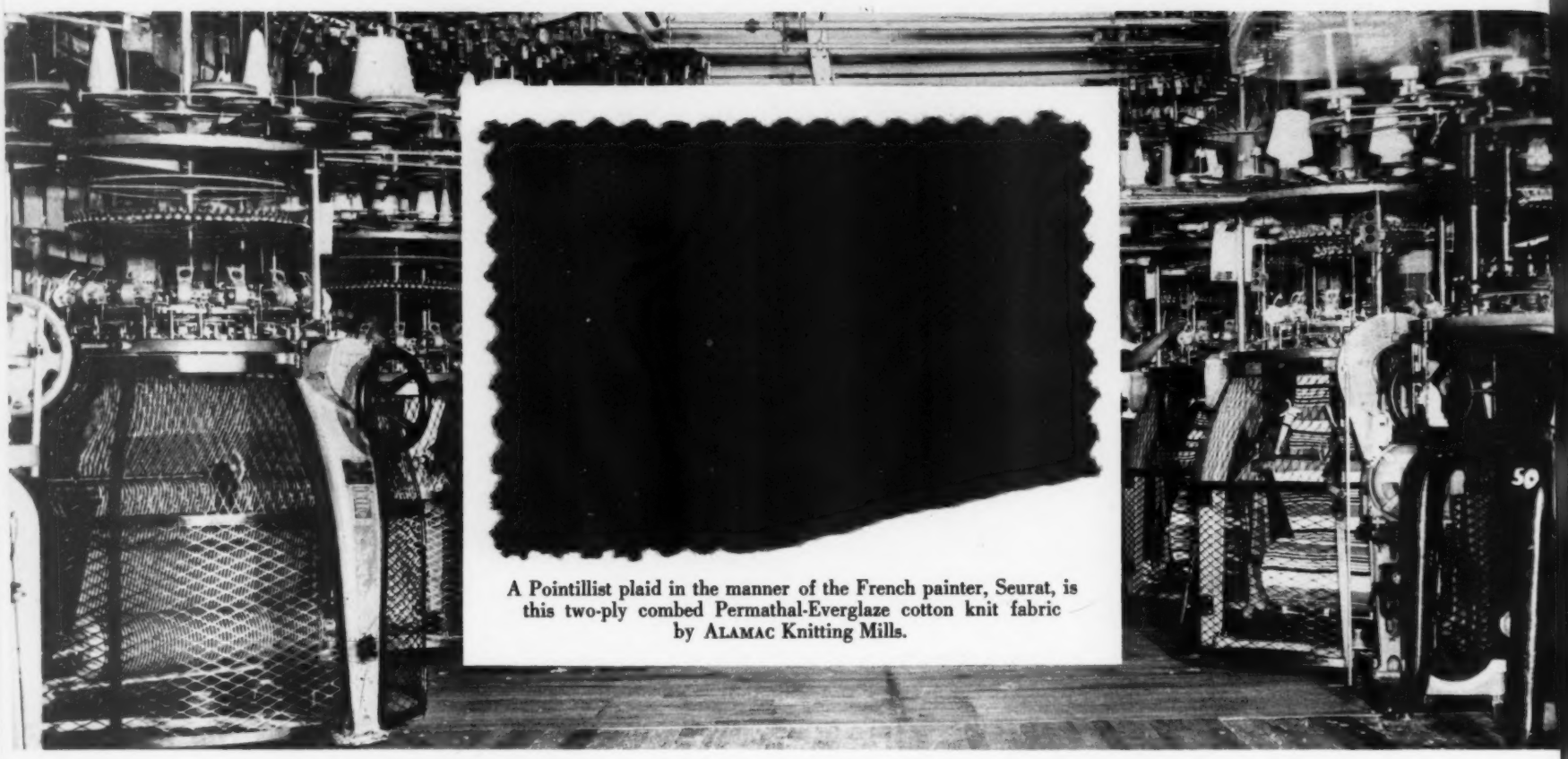
Twice each year Bill Jacobson travels to the Orient and to Europe, seeking specialized mills for his kind of goods. He naturally keeps a sharp eye trimmed for turning fashion trends; and so when the new trend is ready for marketing he has precisely the fabrics the manufacturing trade will need. India Madras, as an example, has long been a particular specialty with this company; but the line of patterns specially created for the coming season makes last year's patterns resemble a Model T Ford.

The real growth of Jacobson Fabrics began when William Jacobson got into direct management. He immediately displayed that indefinable sense of Fashion which lifted the company's cloths beyond the realm of count and construction. Throughout his wide-flung travels he noted keenly the upsurge of certain types of dress among the upper classes; and as a result the Jacobson line soon became rooted among better manufacturers as the place to look for the new Fashion ideas. India Madras, now widely accepted even at popular prices, was and is still strong, but Jacobson's application of color and design today reflects the quiet-but-not-somber spirit of today's favored trend among better dressed men.

One of the current innovations in the line is the printed silk jacketing. There is interest in the rough-spun type of silk body; there is impact in the design printing which is done in a series of harmonizing tones. Among these various photos you will recognize several current strong Fashion trends; some of them have been successfully marketed for a number of years, but this does not mark down their worth. Another Jacobson innovation is a group of new variations on the tribal-print shirt . . . and you may depend on it that the Fashion-sense of Jacobson almost guarantees a strong future for this type of pattern.

* * *

Today the business is being ably run by the second and third generations: William Jacobson and his son Dick. The founder retired from active participation more than twenty years ago; but he left indelibly inscribed in his son and grandson the conviction that their goods would sell *only* if it continued to cram attractive styling into every pick.



A Pointillist plaid in the manner of the French painter, Seurat, is this two-ply combed Permathal-Everglaze cotton knit fabric by ALAMAC Knitting Mills.

The Healthy Growth of Knitted Fabrics

The Constant Spur of New Ideas in Texture, Weight and Color has Stimulated Sales in all Apparel Industries

THE STORY BEGINS with Max Thal; but, to his credit, it unfolds to become the story of the organization with which he surrounded himself: of men and women and even workers who *believe* that styling can be the success of a knitted fabrics business, and whose unstinted effort every working hour is devoted to the one end of making every yard of Alamac fabric stand for something in a market which has for too long been the object of everyone's toe.

It is, in truth, *their* story; it is even the story of the smiling young woman who so painstakingly sets the wheels for each new jacquard pattern, and puts uncalled-for care and thought into her work to make the pattern come out just right. It is, in short, the expansion of an unusual philosphy from the one man to an entire organization . . . and what this has achieved for the entire fashion industry.

The Alamac story cannot be told alone in terms of the huge two-building plant in Indian Orchard or the one in Holyoke, Mass.; nor in terms of the several million dollars' worth of raw stock inventory which flows steadily through the machines. These are the *end* result of what Max Thal and his Alamac associates have built over many years.

Like many a businessman, Max Thal entered the business at the bottom; and again like so many other successes, he came into the knitted fabric industry by chance. He tended machines; he bought raw stock; he was a salesman; he supervised styling and promotion and merchandising . . . and in each phase he proved how sound his superiors were in their selection of this one lad from the many who applied for and was accepted for the job as stock boy.

The two buildings in which Alamac fabrics are knitted are an education to anyone who has never studied at first hand the operation of a well organized mill. But it is in neither the multi-million-dollar investment in modern machinery nor in the million-and-a-half-pound running inventory of yarns that the Alamac success story is spelled. Instead, it is in a comment made by one of the Indian Orchard executives that one learns the clue to Alamac's scintillating performance: He said, "Almost all of the phone calls and teletype messages which come from the New York office are concerned with (a) new weaves (b) new blends (c) new colors (d) new designs or (e) a better hand and finish."

In short, the essence of the Alamac business, from its beginning to today and for so long as it survives, has always been and always will be *styling*. The Alamac executives had the very strong conviction that as soon as World War II ended, the American trend toward a more relaxed form of living would call for fabrics best expressing and best fitting that type

of living. But, they felt, the race must soon go to the swift in styling: knitted fabrics *must* experience a rise, but the mill with the *most* of the *good* ideas would get the *most* of the *good* business.

They activated this thinking throughout the organization. The Alamac ideas were *practicable*, because they were based on a complete knowledge of the firm's equipment and what it could be made to produce.

The road upward was not so easy to scale. Alamac had to fight for many of its new ideas; many people among its customers, despite their fashion reputations, were inclined (as so many were right after the war) to keep riding the old ideas until they dropped from exhaustion. But it was not long before many of the nation's smartest apparel *merchants* were coming to Alamac to find out which manufacturers had the best ideas in knitted goods; at the same time the company's advertising program was conceived to convey this same leadership thinking to the consumer and the trade.

It often happens that Alamac itself is not interested in making certain fabrics; and yet, so imbued is the company with its spirit of idea-leadership in knitted fabrics that there is no dog-in-the-manger attitude when it comes to laying ideas on the table. In a number of instances other mills have profited from ideas which Alamac had occasionally suggested to fiber or yarn producers.

This brings up a sound philosophical decision made long ago by Alamac executives. In piece-dyed fabrics the mills carry a huge inventory of goods in the grey, ready to dye up and finish for fast fill-in service; not even solid black is carried in stock, but every yard is dyed to order. When it comes to patterned goods, or ingrain goods (this means the yarns are dyed in advance, and then woven) every inch is loomed to a written order. This decision eliminated one of the costliest profit-leakages in the textile business; at the same time, once Alamac customers learned the advantages, they realized that the policy redounded as much to their benefit as to Alamac's. Too often a manufacturer places scant thinking behind the selection of colors and patterns; he is apt to say indiscriminately, "Send me a five-yard cut of each of these patterns, and I'll see how they make up." What he does not realize is that it costs a well-run mill exactly $155 *in time alone* to set up the wheels on a jacquard knitting machine just to loom up each five yards . . . and either the customer pays for this waste in the long run or the mill finally goes out of business.

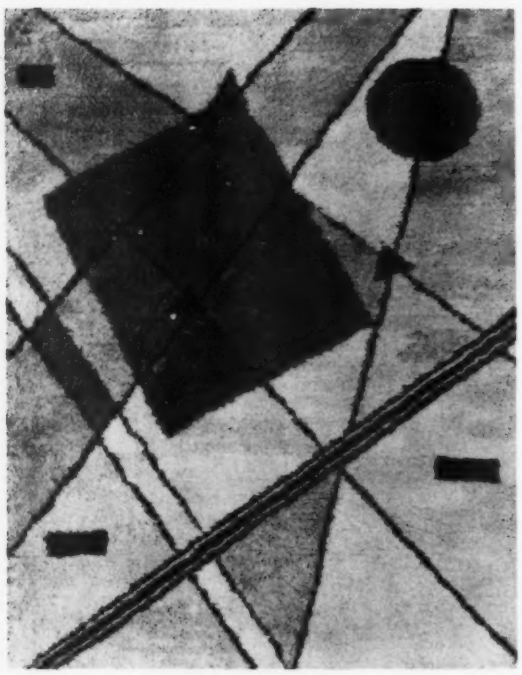
Fashion is more than a fetish at Alamac. It is the beginning, the in-between and the desirable end. It has elevated the firm to the status of industry leader and will continue to do so.

This is why American Fabrics believes so wholeheartedly in the future, not of Alamac alone, but of all knitted fabrics and of the use of these cloths by the apparel industries. So long as there exists a company which continues to burn the lamp of enlightened fashion progress, and which continues so unselfishly to disseminate its ideas and experience to the good of all . . . we foresee a good future for everyone who follows the beam cast by its torch.

(At right) A group of Alamac fashion originations.

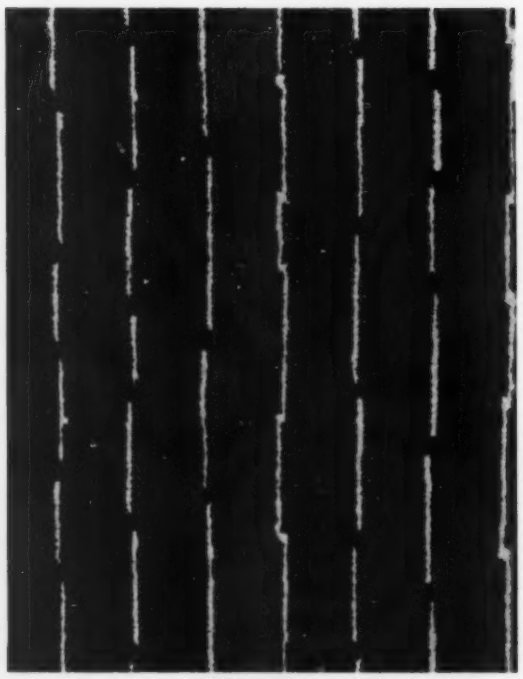
BITTAN VALBERG

The rugs reproduced on these pages do not have to take a back seat to many fine abstract paintings which are in current vogue.



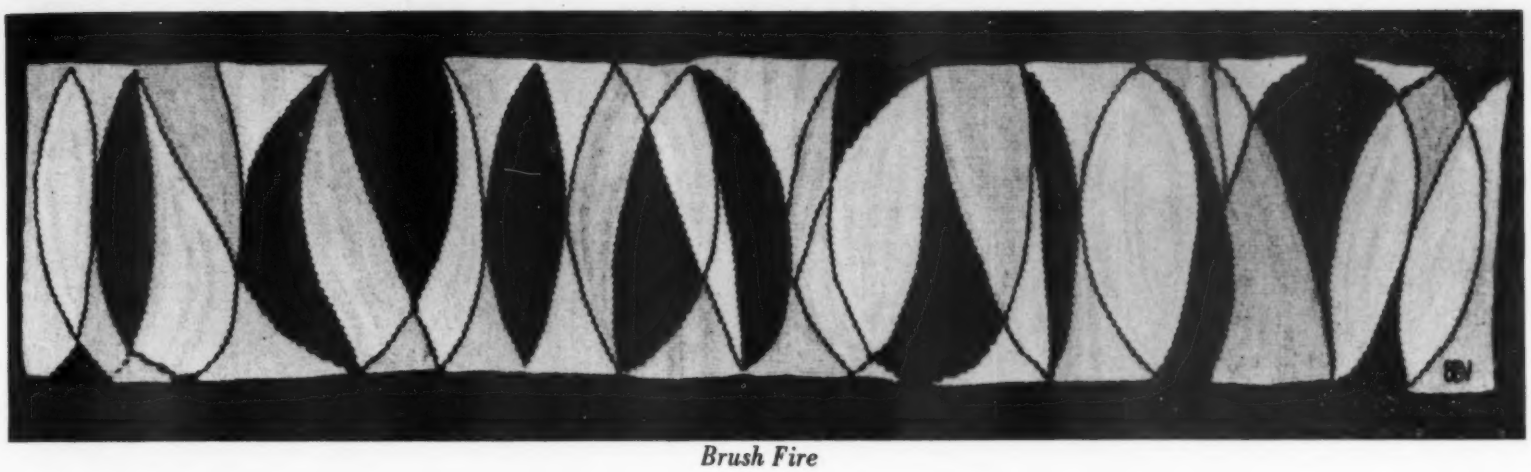
Moon Missile

Sky City



Avenues

Foundations



Brush Fire

VALBERG - ARTIST in YARNS

Bittan Valberg is currently achieving artistically important floor coverings by manipulating the colors in yarns just as she was originally trained to use oils and water colors.

WHEN THE INTERIOR decoration cognoscenti had their first view of the new Cabin Crafts collection of modern floor coverings, one thought appeared to have leapt into virtually every mind: *These rugs would make as artistic wall decorations as floor coverings.* And, indeed, the authority and originality expressed in each rug in the collection was an expression as well as an extension of the design creator: Mrs. Bittan Valberg.

Mrs. Valberg is more than a functional designer. She approaches each assignment as a challenge to her training and instincts as a competent artist. This is one reason why her designs express both originality and authority. The manner in which she handles Acrilan yarns is an example: in her skilled hands they take the place of color-tubes. Thereby her designs display almost infinite mutations of color *and* texture; a grey is not one grey but many shadings of green-blue-violet tinged yarns which combine to give an effect of grey. In one rug design you will be struck by the use of thick-and thin yarns of various deniers; clipped here, looped there, densely packed or more loosely spaced for a shaggy texture.

The eye sees first the bold impact of a Bittan Valberg design; but a second look reveals the subtlety with which the many colored yarns have been manipulated to achieve the artistic effect. She won a name in her native Sweden for her signed, custom-made rugs, wall hangings and draperies. When she packed her trunks with full lengths of her works and brought them to America, she caused a stir among the editors and among the relatively few people who could afford to pay $180 a square yard for the handloomed rugs. Now her ideas are being circulated by machine; her lifetime ideal because she would like the many to enjoy good quality in design and color . . . especially as she feels that a floor covering should contribute more to a room than providing a neutral background. . . . It could be the focal point in an interior! She says, "Art, life and nature can be wrapped up in a rug."

Bittan Valberg is shown with one of her large (Acrilan) rug abstractions.

Boy spinning.

Woman preparing warp for pre-Columbian back strap loom (to weave belt).

TEXTILE WEAVING... 10,000 years ago and today

Like their craft ancestors, whose methods they still follow, the Indians of Otavalo, Ecuador, are superb textile creators. Today their ten-thousand-year-old styles are sought in every market throughout the country.

SATURDAY MORNING is market day in the town of Otavalo, a tiny village in Ecuador. The market dates back to the time of the Inca civilization; that is, before the Spanish conquest of the South American continent. The Indians in the valley bring hand-made specialties of their community to trade and sell. Among them are ponchos of heavy wool (double faced, reversible), wool shawls, woven belts (fajas), blankets, rope (fiber of the cabuya cactus), mats and fans of lake rushes, baskets and hats of split cane, pottery, cotton textiles.

"THE FIRST LONG RAYS of sunlight find the market already in full swing. In one broad plaza almost all the buyers and sellers are full-blooded Indians. Men with ponchos to sell occupy one long row at the edge of the square. Each Indian places his ponchos on a cotton cloth on the ground and stands behind them against the wall waiting patiently for customers, confident that his handiwork is known and sought after throughout Ecuador. A customer examines the quality, size, and color; asks the price, makes an offer, pretends to go looking for a better bargain; returns and offers a few more sucres. Finally, seller and buyer reach an agreement, and the transaction is completed. Among the crowd there are dealers who buy as many of the ponchos and other woolen goods as they can carry. These dealers come to the Otavalo market early in order to choose quietly and to avoid too many competitors. By seven o'clock the best ponchos, shawls and woolen suitings are gone, and the dealers are already on their way to other markets of the Ecuadorian highlands as far north as Tulcan and as far south as Loja."

In this valley surrounding Otavalo the boys learn to farm and weave. The girls are taught to sew and embroider, to spin wool or cotton with the reed spindle or the spinning wheel, to wash and to cook.

The local costume of the Indian man consists of hand-woven cotton pants and shirt; one or two ponchos (wool; woven on the pre-Columbian backstrap loom); felt hat (usually hand-made); and sandals of rope. The Indian woman wears a long shirt reaching to the ground (hand-woven muslin type textile); rectangles of cotton or woolen material fastened around her

Source material: *The Awakening Valley*. Authors: John Collier, Jr., Anibal Buitron. The University of Chicago Press, 1949.

PHOTOS BY SHEILA HICKS

Poncho weavers selling in local market.

Short ponchos woven of silk threads. Traditional costume worn by cowboys in Chile (still in use).

with pins. This lack of cutting and tailoring points to the antiquity of the styles. She also wears a felt hat over a piece of material wrapped around her head; two woolen, hand-woven belts; many chains of beads about the neck and wrists; and finger rings.

"THE TEXTILE CULTURE of the Otavalos goes back to the earliest history of the Andean Indians. Before the conquest, before the coming of the Incas, the Otavalos and Indians of other tribes in Ecuador were weaving blankets and cloaks from cotton they obtained in trade with the people of the Amazon jungle. The backstrap loom that served them in forgotten times is still in use today in the making of blankets and ponchos. The Indians call these pre-Columbian looms "poncho weavers" to differentiate them from the European loom brought by the Spaniards. When the Indians adopted the llama from the Inca and the sheep and goat from the Spanish, they wove the wool of these animals as well as the traditional cotton.

"The Otavalo Indian is undoubtedly one of the finest weavers of the Andes. The products of his looms are sought in all the markets of the country." You can observe Otavalo Indians on the streets and in the buses as far away as the city of Lima in Peru, in their native costumes, and engaged in an old pursuit — selling ponchos.

Child with poncho, Otavalo, Ecuador.

Man weaving poncho.

Otavalo boy preparing wool.

ALABAMA POLYTECHNIC INSTITUTE SCHOOL OF TEXTILE TECHNOLOGY

LOCATION: Auburn, Alabama

MANUFACTURING LABS.: Weaving, cotton spinning, synthetics.

CHEMICAL LABS.: Dyeing, bleaching, finishing, testing.

OTHER: Physical testing, research.

ADMISSION REQUIREMENTS: Graduate of accredited high school.

DEGREE OR SUBJECT: B.S. in Textile Chemistry. LENGTH: 12 quarters. PREPARATION FOR: textile chemists, dyers.

DEGREE OR SUBJECT: B.S. in Textile Engineering. LENGTH: 12 quarters. PREPARATION FOR: General adaptation for industry.

DEGREE OR SUBJECT: B.S. in Textile Management. LENGTH: 12 quarters. PREPARATION FOR: Production and operational management.

DEGREE OR SUBJECT: Textile Manufacture (certificate). LENGTH: 12 quarters co-op. PREPARATION FOR: Manufacturing supervision.

TUITION: Free to Alabama Residents, certain fees assessed; Non-Resident Tuition: $55 per quarter plus fees.

BRADFORD DURFEE COLLEGE OF TECHNOLOGY

LOCATION: Fall River, Mass.

MANUFACTURING LABS.: Cotton spinning, warping and slashing, weaving.

CHEMICAL LABS: Dyeing, finishing.

OTHER: Microscope, testing, research.

ADMISSION REQUIREMENTS: High school graduate with 15 credits (3 math., 1 science, 4 Eng., 1 history required).

DEGREE OR SUBJECT: B.S. in Textile Engineering. LENGTH: 4 years. PREPARATION FOR: General application.

DEGREE OR SUBJECT: B.S. in Textile Manufacturing. LENGTH: 4 years. PREPARATION FOR: General application with emphasis on production.

DEGREE OR SUBJECT: B.S. in Dyeing and Finishing. LENGTH: 4 years. PREPARATION FOR: Dyers and finishers.

DEGREE OR SUBJECT: B.S. in Textile Styling. LENGTH: 4 years. PREPARATION FOR: Fabric designers.

DEGREE OR SUBJECT: B.S. in Art and Product Development. LENGTH: 4 years. PREPARATION FOR: Fabric stylist and fashion illustration.

TUITION: Mass. Resident Tuition: $150 per year; Non-Resident Tuition: $250 per year; Foreign Students: $500 per year.

CLEMSON AGRICULTURAL COLLEGE, SCHOOL OF TEXTILES

LOCATION: Clemson, South Carolina

MANUFACTURING LABS.: Throwing, weaving, cotton, wool and worsted spinning.

CHEMICAL LABS.: Dyeing, finishing.

OTHER: Fiber research lab., physical testing, evenness lab.

ADMISSION REQUIREMENTS: High school graduate with 16 units (3 Eng., 1½ algebra, 1 plane geometry suggested).

DEGREE OR SUBJECT: B.S. in Textile Science. LENGTH: 4 years. PREPARATION FOR: Production, research and development work.

DEGREE OR SUBJECT: B.S. in Textile Management. LENGTH: 4 years. PREPARATION FOR: Production and management work, with knitting option.

DEGREE OR SUBJECT: B.S. in Textile Chemistry Dyeing and Finishing. LENGTH: 4 years. PREPARATION FOR: Various positions in chemical phases of industry.

DEGREE OR SUBJECT: B.S. in Knitting Development. LENGTH: 4 years. PREPARATION FOR: Yarn manufacturing, all phases of knitting industry.

DEGREE OR SUBJECT: M.S. Textile Chemistry. PREPARATION FOR: Various places in chemical phases of industry.

TUITION: South Carolina Resident Tuition: $150 per year; Non-Resident Tuition: $350 per year; Note: (Total cost to attend: $900 to $1000 per year).

GEORGIA INSTITUTE OF TECHNOLOGY

LOCATION: Atlanta, Georgia

MANUFACTURING LAB.: Cotton, wool, synthetics, knitting.

CHEMICAL LAB.: Dyeing, finishing, testing.

OTHER: Testing, physical, and chemical research.

ADMISSION REQUIREMENTS: High school graduate with suitable record: (15 units, 3 English, 2 algebra, 1 plane geometry, 1 history, 2 science, 6 options).

DEGREE OR SUBJECT: Bachelor of Textile Engineering. LENGTH: 4 year or 5 year co-op plan. PREPARATION FOR: Textile engineering.

DEGREE OR SUBJECT: B.S. in Textiles. LENGTH: 4 or 5 year co-op plan. PREPARATION FOR: Textile manufacturing, textile chemistry and dyeing.

DEGREE OR SUBJECT: M.S. in Textile Engineering. LENGTH: 1 to 2 years. PREPARATION FOR: Research and development work.

DEGREE OR SUBJECT: M.S. in Textiles. LENGTH: 1 to 2 years. PREPARATION FOR: Research and development work.

TUITION: Georgia Resident Tuition: $216 per year; Non-Resident Tuition: $600 per year.

LOWELL TECHNOLOGICAL INSTITUTE

LOCATION: Lowell, Massachusetts

MANUFACTURING LABS.: Can process all fibers by all commercial systems from raw stock to finished fabric.

CHEMICAL LABS.: Dyeing, bleaching, finishing, microbiology, testing.

OTHER: Testing, textile physics, research.

ADMISSION REQUIREMENTS: Graduate approved secondary school, 2 years algebra, 1 geometry, 1 chemistry or physics.

DEGREE OR SUBJECT: B.S., (M.S.) in Textile Engineering. LENGTH: 4 years. PREPARATION FOR: Textile engineering, general manufacturing.

DEGREE OR SUBJECT: B.S. in Textile Technology. LENGTH: 4 years. PREPARATION FOR: Cotton, wool, synthetic manufacturing, textile designers, sales managers.

DEGREE OR SUBJECT: B.S. in Textile Chemistry (M.S. and Ph.D.). LENGTH: 4 years. PREPARATION FOR: Bleaching, scouring, dyeing, printing, finishing.

DEGREE OR SUBJECT: M.S. in Textile Chemistry. LENGTH: 1 or 2 years. PREPARATION FOR: Industrial or research positions in textile chemistry.

DEGREE OR SUBJECT: M.S. in Textile Engineering. LENGTH: 1 or 2 years. PREPARATION FOR: Textile engineering, manufacture or research.

TUITION: Mass. Resident Tuition: $150 per year; Non-Resident Tuition: $250 per year; Foreign Students: $500 per year.

NEW BEDFORD INSTITUTE OF TEXTILES AND TECHNOLOGY

LOCATION: New Bedford, Massachusetts

MANUFACTURING LABS.: Yarn, fabric, and finishing equipment required to operate to capacity the 85 looms available in the weaving department.

ADMISSION REQUIREMENTS: Degree: High school graduate, 15 credits (5 English, 1 Algebra, 1 Geometry, 1 U.S. History).

DEGREE OR SUBJECT: B.S. in Textile Engineering. LENGTH: 4 years. PREPARATION FOR: Textile engineering, fabric manufacturing, converting, testing, selling, factoring.

DEGREE OR SUBJECT: B.S. in Textile Chemistry. LENGTH: 4 years. PREPARATION FOR: Textile chemistry, dyeing, finishing.

DEGREE OR SUBJECT: B.S. in Textile Design and Fashion. LENGTH: 4 years. PREPARATION FOR: Fashion or textile designers.

DEGREE OR SUBJECT: Diplomas in General Textile Manufacturing, Designing, Chemistry, Dyeing, Finishing, and Knitting. LENGTH: 3 years. PREPARATION FOR: As subject named.

DEGREE OR SUBJECT: Certificates in Textile Technology (women), Drafting, Machine Shop Drafting. LENGTH: 2 years. PREPARATION FOR: Technology, lab. work, designing, buying, education, consumer relations.

TUITION: Mass. Residents Tuition: $150 per year; Non-Residents Tuition: $250 per year; Foreign Students: $500 per year.

NORTH CAROLINA STATE COLLEGE SCHOOL OF TEXTILES

LOCATION: Raleigh, North Carolina

MANUFACTURING LAB.: Cotton, synthetics, and wool spinning on cotton, woolen and American worsted systems, warp preparation and weaving, physical testing and research.

OTHER: Bleaching, dyeing, finishing, chemical testing and research. 4,000-volume Burlington Mills library.

DEGREE OR SUBJECT: B.S. in Textile Technology, 7 fourth year options. LENGTH: 4 years. PREPARATION FOR: Management, production, quality control, research, sales.

DEGREE OR SUBJECT: B.S. in Textile Chemistry. LENGTH: 4 years. PREPARATION FOR: Management, production, quality control, research sales.

DEGREE OR SUBJECT: M.S. in Textile Technology. LENGTH: 1 to 2 years. PREPARATION FOR: Management, production, quality control, research sales.

DEGREE OR SUBJECT: M.S. in Textile Chemistry. LENGTH: 1 to 2 years. PREPARATION FOR: Management, production, quality control, research, sales.

DEGREE OR SUBJECT: Depends on textile degree desired by student.

TUITION: North Carolina Resident Tuition: $280 per year; Non-Resident Tuition: $640 per year.

PHILADELPHIA TEXTILE INSTITUTE

LOCATION: Philadelphia, Pennsylvania

MANUFACTURING LAB.: Cotton, wool, worsted spinning, weaving, knitting.

CHEMICAL LAB.: Dyeing, bleaching, finishing, all chemical.

OTHER: Testing, research, physical sciences, spectroscopy, microscopy.

ADMISSION REQUIREMENTS: Graduate of approved high school; math, science, Eng. required; recommendation and personal interviews.

DEGREE OR SUBJECT: B.S. in Textile Engineering. LENGTH: 4 years; majors in knitting and weaving. PREPARATION FOR: Production, research, quality control, sales management potential.

DEGREE OR SUBJECT: B.S. in Chemistry and Dyeing. LENGTH: 4 years. PREPARATION FOR: As above, emphasis on production, chemistry and dyeing.

DEGREE OR SUBJECT: Diploma in Textile Technology. LENGTH: 3 years. PREPARATION FOR: As above, emphasis on production.

DEGREE OR SUBJECT: Certificates — Various subjects (evening). LENGTH: 6 years. PREPARATION FOR: Upgrading in industry.

DEGREE OR SUBJECT: Depends on textile degree desired by student.

TUITION: U.S. Citizen Tuition: $450 per year; Foreign Students: $550 per year; Fees $85 per year.

RHODE ISLAND SCHOOL OF DESIGN

LOCATION: Providence, Rhode Island

MANUFACTURING LAB.: Wool, worsted, cotton and synthetic yarn manufacture, and weaving (to be discontinued 1960).

CHEMICAL LAB.: Dyeing, bleaching, finishing.

OTHER: Testing, research, physical sciences, spectroscopy, microscopy.

ADMISSION REQUIREMENTS: High school graduate or equivalent, math., science, required; Entrance exam. — personal interviews.

DEGREE OR SUBJECT: B.S. in Textile Manufacturing. LENGTH: 4 years (discontinued in 1960). PREPARATION FOR: Junior executive, textile management, production.

DEGREE OR SUBJECT: B.S. in Textile Coloring and Chemistry. LENGTH: 4 years. PREPARATION FOR: Textile chemists, dyers, finishers.

DEGREE OR SUBJECT: B.F.A. in Textile Design. LENGTH: 4 years. PREPARATION FOR: Woven or print cloth designers.

DEGREE OR SUBJECT: Certificates — Various subjects (evening). LENGTH: Various lengths of time. PREPARATION FOR: Upgrading in industry.

TUITION: For Men: $800 per year; For Women: $750 — to include rent and board.

TEXAS TECHNOLOGICAL COLLEGE

LOCATION: Lubbock, Texas

MANUFACTURING LAB.: Cotton, wool and synthetics; spinning, weaving, knitting.

CHEMICAL LAB.: Finishing, bleaching and dyeing.

OTHER: Machine shop testing.

ADMISSION REQUIREMENTS: Graduate of state accredited high schools; math., chemistry, engineering and humanities.

DEGREE OR SUBJECT: B.S. in Textile Engineering. LENGTH: 4 years. PREPARATION FOR: Textile engineering.

DEGREE OR SUBJECT: B.S. and B.A. in Textile Engineering. LENGTH: 5 years. PREPARATION FOR: Textile engineering.

TUITION: $50 per semester, Residents of Texas: $100 for Non-Residents.

The Textile Schools of America

Where they are . . . What they offer . . . Why The Textile Industry should support them in every way . . . and How Dividends can accrue to those who utilize them

Ten major educational centers, spread from coast to coast, are devoted entirely to the teaching of individuals who intend to make one or another facet of textiles their life work. These ten schools comprise the National Council for Textile Education; each is headed and staffed by competent instructors; men and women who themselves proved their interest as well as their acumen in prior affiliation with commercial textile enterprises before they turned to teaching.

The schools offer, therefore, not only the most modern equipment for the manufacture of everything from fiber to finish; but at the same time students are taught, by people who are qualified, how to use this equipment in practical laboratory work. This, in effect, means that a graduate from any of these ten schools comes into the textile industry not as a raw theorist, but virtually as an individual with several years' actual experience. Most of the financial burden of supporting these schools falls on the shoulders of the individual States in which they are situated; this is to be expected, since the schools are located in areas which gain much of their income from textile companies. In addition, a number of progressive companies, mindful that the future of the industry depends on the constant accumulation of better trained executives, make substantial financial contributions to the schools.

How a single textile company . . . be it a fiber producer, a weaving mill, a finisher or converter . . . can profit through close working with these schools should be obvious. If it is understood that the schools can serve as a source of supply for better thinkers, then it becomes axiomatic that financial help should be given by every company which considers itself a positive factor in textiles. These contributions go for better equipment as well as for better teachers. Second, to encourage more young men and women of talent to make textiles their career, companies should make it a matter of basic policy to hire . . . whenever possible . . . a textile school graduate. The statistics prove that a competent textile school graduate generally earns more actual income in his first ten post-school years than in virtually any other specialized field. The best way to make this information work for the textile industry is to make it known to young people that you *prefer* a textile graduate for the job you have to offer. Over a period of time this will help to develop a greater interest among a greater number of high school students, and thus lead to a greater enrollment and a greater pool of talent on which you can draw.

It must be borne in mind by textile industry leaders that, just as they compete with other and unallied industries for the consumer dollar, they are also in constant competition with other fields to attract the best brains. In the immediate postwar period the electronics field made . . . and is still making . . . strong and alluring bids for young talent in engineering; and yet it is safe to reason that a number of talented young men who were attracted to electronics, or aviation, or air conditioning companies might just as easily have been drawn to textile engineering, *if* this industry had presented its own case just as interestingly. The textile business runs on machinery, but it needs *brains* to direct and operate these machines . . . and this is the product which is obtainable at a high level from the textile schools.

It is our suggestion, if you are in accord with this reasoning, that you get in touch with the textile schools nearest you. Ask them how your company can cooperate, and how you can benefit through the use of textile schools. *But do it now.*

MORTON GOLDMAN

STANLEY ELKINS

. . . But Does It Have Fashion Liveliness?

Crestwood asks of Every New Fabric that it have Ingenuity, Newsworthiness and, above all, that it reflect Fashion Liveliness

EVERY ONCE IN A WHILE, and to everyone's startlement, a new company begins to make its mark in the textile industry. When the rumors have been sifted and the facts determined, it invariably is discovered that what enabled the new company to make such an impression stemmed from two basics; (1) usually it is a combination of young-in-mind people who, feeling they have nothing to lose, will try unusual and courageous paths in their quest for saleable fabrics and (2) they have the force and inner excitement to put over these ideas without loss of these emotional factors on the receiving end.

What these small mills have to offer (and Crestwood, truly a recent arrival, is typical) . . . and what makes their customers so *eager* to see them season after season is this blend of new ideas and courageous selling. Crestwood has expanded its operation into other fibers; but it must be remembered that this small company made its initial mark in an area where even veterans agreed the going was tough: *woolens.*

Crestwood Textile Corporation has two dynamic young men at its helm: Stanley Elkins whose province is creation and styling; and Mort Goldman who handles the sales, merchandising and production end. Both are graduates of the famed Philadelphia Textile Institute where they learned the technology of fabric construction and the most modern methods for producing high quality goods. Their background, new ideas, and practicality . . . plus one more factor: the determination to produce top styled fabrics at competitive prices . . . have swiftly placed Crestwood in an envious position and opened the gates to the big cutters' offices.

Adherents to the philosophy that style is the prime mover of merchandise, they have allowed themselves great flexibility in choosing fibers. They are not wedded to any particular type though they have concentrated their efforts primarily in natural fibers and viscose rayon. Their sole activating interest lies in the direction of creating new fashion fabrics . . . and to forget last year's successes even in their own lines.

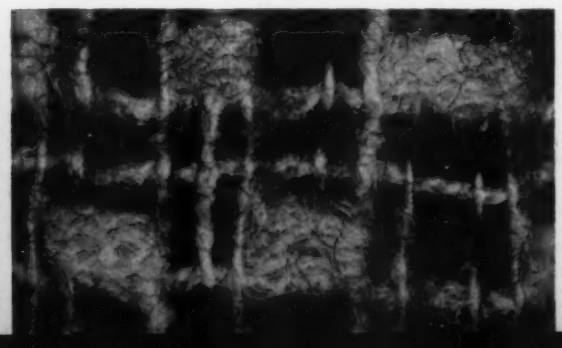
Eye-appeal is their first consideration in choosing a pattern, color or weave. Because of their thorough knowledge of fabrics and styling, they are able to visualize the cutter's finished product and are thus able to work closely with him in arriving at the perfect colors or weaves for the individual manufacturer. This, plus their reputation for fairly quick delivery (cottons are delivered in 3 to 4 weeks despite the fact they may include three or four hundred numbers), accounts for the good business they do in confined fabrics.

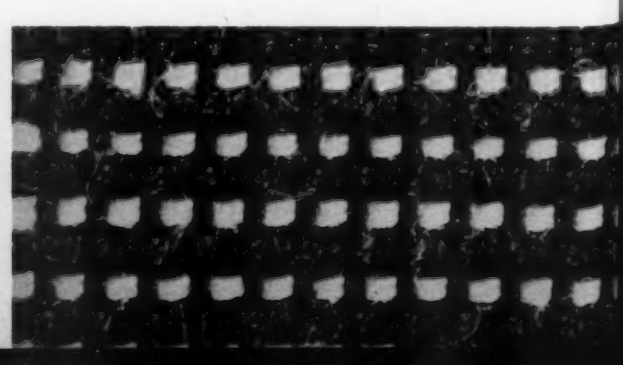
Elkins and Goldman have brought to their industry modern business thinking. They believe in thoroughly trained executives, preferably those from textile schools such as Lowell or Philadelphia, who can be given responsibility and authority. Their young organization (the entire staff is under 40) participates in a sound profit-sharing plan and benefits from a broad insurance program. They believe that small business must take its cue from larger companies in employee benefits if it is to attract creative top grade people.

When not at their business, Elkins and Goldman can be found with their families. The partners are even compatible in their after-hours interest: Stan, the stylist is also an avid painter; Mort collects art works and possesses many fine works of American and European painters.

The two men who built Crestwood from a gross of $65,000 in the first year to a multi-million business eight years later, and whose line has expanded from a half dozen items to hundreds of different styles each year, are still thinking in terms of growth. This year they have incorporated a print operation, are going into knitwear, and may even enter the men's field in the future.

"One thing about this business," said Elkins, "you have to look *ahead* before you find yourself *behind* everyone else."





WHO'LL STRAIGHTEN OUT MRS. CONSUMER

on the subject of

WASH and WEAR ?

Who'll tell her what's Fact and what's Fiction?

Who'll separate Publicity from Performance?

How'll Mrs. Consumer know which fabrics will wash and wear — and which won't?

How can she tell the degree of wash and wearability?

What's the difference between wash and wearability in the fiber and in the finish?

What about Dacron, Acrilan, Kodel, Arnel, Creslan, and other claimants to fame?

How can she be sure of automatic wash and wear?

What about the blends of two or more fibers?

WASH and WEAR
THE CONSUMER WANTS TO KNOW

For years *American Fabrics* has taken the position that the Consumer absolutely and positively Wants to Know. Never has that fact been more impressively brought home than by the present wash and wear situation. Furthermore, she *needs* to know more than ever, because she's buying the most complicated, most technically involved, most variable and most widely misunderstood merchandise that she has ever purchased.

Nor are buyers of wash and wear garments much better off, regardless of the individual buyer's knowledge, experience, smartness or devotion to duty either. The most astute and best qualified retail merchandising executives cannot possibly keep up with the incredible tempo of today's textile developments. A comparative evaluation of the wash and wear performance of the various fibers and finishes is next to impossible.

So what does the buyer do then? Go to the manufacturer? Go to the mill? Go to the finisher? Go to the chemical company? With all due respect, you might go to any and all and come back with nothing but information about the particular wash and wear product or ingredient in which the particular respondent happens to be involved — glorified, to be sure, by the inevitable sales pitch. Don't we all?

So where does that leave us, considering the thousands of wash and wear fabrics on the market from hundreds of mills and finishing plants involving scores of fibers and finishes fashioned into a fantastic array of garments and household products for every possible textile purpose, with the possible exception of coffin linings — but don't bet on that.

THERE IS ONLY ONE CONCEIVABLE SOLUTION

Unless you surrender to unmitigated chaos there is just one way out, just one possible answer to the Consumer or to the Buyer (or to the many textile experts, for that matter) and that answer lies in the Brand Name. Endorsements have their place. So have Laboratory Tests, Seals of Approval, Accolades by Publications, Official Certifications and other Warrants of Worth. The ultimate assurance of satisfaction, however, must reside in the Brand Name. Since

IRON ?
Some things need little ironing, some lots. Stick to the facts.
Don't BLAME ME! YES, SIR
Even the oldest washing machine can do a good job with Wash and Wear
WATER
SUN
True blue friends of a true Wash and Wear finish in fabric
WHAT'S FACT and WHATS FICTION
WHICH NAMES CAN SHE TRUST ?
WHO HAS THE RESPONSIBILITY
Mom never had it so GOOD!
Wash and Wear has taken the place of Wash-and-Weary for women
SOAP
Any good soap without too much lye is good for Wash and Wear
Chlorine
Loves a cheap finish; sticks to threads and makes them yellow

it is impossible any longer to Know, there is nothing left for the Consumer but to rely on the honor and integrity of the makers and a limited number of retail store merchants.

How do Mr. or Mrs. Consumer buy a new kind of electric lawn mower? Or a deep freeze? Or an air-conditioning unit? By comparing competing products for themselves? That would certainly be great. All they'd have to do would be to get a few degrees in mechanical engineering, electrical engineering and other kinds of engineering. That approach doesn't even make a good joke. Some people may think they analyze specifications but they really make their choice on the basis of three considerations: (1) The color or style that pleases them. (2) The price they're willing to pay. (3) And most important of all, the confidence they have in the maker that their purchase will perform as promised.

When you think in these terms, it becomes crystal clear that the same trilogy of considerations applies to the purchase of wash and wear garments. *The pocket book opens when the consumer likes the color and style, accepts the price and trusts the name.* The day of the little old lady who rummaged through the piece goods counter, holding fabrics to the light, feeling them, stacking up one against the other, is as remote as a Currier & Ives print. Like everybody else, the little old lady has to take the explicit or implicit assurance of the Brand Name for the fabric's wash and wearability. She has no other way of telling the authentic from the alleged.

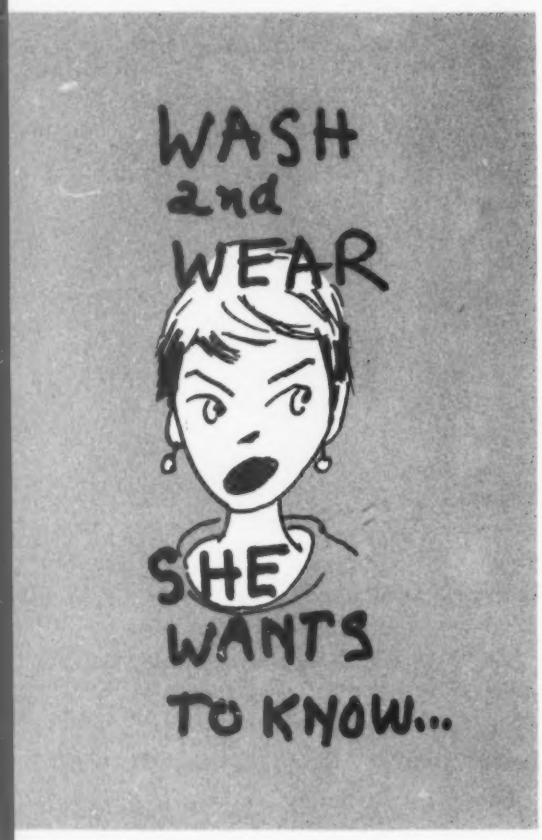
Does this mean the end of the so-called "informative tags" on wash and wear merchandise? Anything but. There are so many kinds of wash and wear for so many different purposes that it is of vital necessity to spell out performance characteristics in each and every case. If you will study the current crop of tags, however, you will note they detail how the fabric will behave, but they no longer try to explain why. That is simply not in the cards.

WHAT PRICE BRAND NAMES?

You will find it quite revealing to examine the brand names of wash and wear merchandise and ask yourself just what they stand for, how strong they are, what influence they wield, how they got that way. The first that sought to establish itself was the name Disciplined. In spite of changes of management and policy and sharply curtailed advertising, Disciplined Fabrics still means as much as any in the field, at least as far as lightweight cloths are concerned. Then you have Wrinkl-Shed Dri-Don, Endowed Fabrics, Northweave,

Coneset — and all of a sudden you are brought up sharply to an abrupt stop. It dawns upon you that there are amazingly few mill names of any real consequence even at the trade level, let alone the consumer level. There are oompty-oompty other names, of course, but most of them are only making a noise like a national brand. You have to be incredibly naive to believe that they influence anybody except the friends and relatives of the employees of the mills that registered the names with the U.S. Patent Office.

In other words, here is an area where the textile industry's classic indifference to or disbelief in advertising is bearing bitter fruit indeed. The few names that mean anything at all are enjoying a distinct competitive advantage which is giving the numerous also-rans furiously to think. The more widely and clearly it is understood in the market that the consumer has practically nothing to guide him or her in buying wash and wear merchandise except the brand name, the more awkward the situation will become for companies that have not made a real name for themselves.



In addition to mills, you must also count brand names of finishing plants, like Saylerized and Everglaze and Cranston Dri-Smooth.

The name, Everglaze, for example, is currently being featured on the package of a Jayson shirt. You will find other trade-marked processes striving for recognition all along the retail selling front and succeeding to a greater or less degree. The most powerful brands by a long shot belong to the great chemical companies, and consumers rely on the built-in reputation of these brands more and more. This is very easy to prove. For example, anyone can say that a dress "washes, drips dry, needs no ironing," *but it ain't necessarily so*, an ugly fact which many a woman has learned to her sorrow. If, however, the advertisement reads (and we quote) that the dress "Comes in *Dacron* that washes, drips dry, needs no ironing," the claim is automatically authenticated. Performance and publicity have made this name one of the pathetically few truly great ones in wash and wear.

One curious development is the current Sanforized advertising program based on the query: Which shall it be? "Wash and Wear? Or Wash and Beware?" Of course Sanforized has nothing to do with a fabric's suitability for wear with little or no ironing. Sanforized has to do solely and simply with shrinkage control. The best wash and wear cottons, and many blends, are Sanforized. Some of the cheap, inferior fabrics claiming to be wash and wear without justification are not Sanforized. Hence the best mills with the best wash and wear finishes have been playing up the fact that their fabrics are Sanforized. So to all intents and purposes, Sanforized has become a name in wash and wear as well as in its own bailiwick.

Some textile companies take the position that they don't need a specific wash and wear brand. They feel their name is sufficient guarantee that the fabric will make good the claim on the tag. Galey & Lord is a case in point. Their tags simply state that the fabric in question will wash and wear. Performance characteristics may be described in detail or covered by the simple phrase, "little or no ironing."

Regardless of reasons why, the fact remains that most of the brand names appearing on wash and wear tags are either not

known at all to the consumers, or vaguely and confusedly at best. One would hardly call that a very good way for one of America's basic industries to get its fair share of the consumer's dollar. The consumer is entitled to assurance of satisfaction. This can be forthcoming only by the establishment of brands strong enough to inspire belief, first among retail merchants, and finally among consumers.

It will be interesting to see which of the textile brand names will seize the advertising opportunity opened up by the consumer's need for assurance of wash and wearability.

WHAT CAN BE THE RIGHT ANSWER?

To state, as we have, that it is time for firms of merit with products of merit to establish their names and processes through advertising is *not* per se the sole answer. In the very first Wash and Wear Study which American Fabrics released over a year ago we believe we placed our thumb squarely on the root of the evil which was already threatening to strangle a great textile opportunity. We urged at that time . . . and we

CONTINUE TO URGE . . . THAT TEXTILEDOM

TELL THE TRUTH

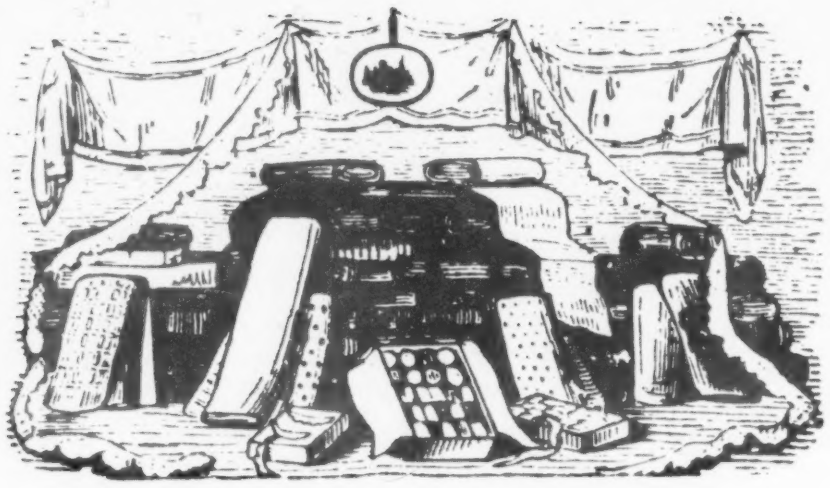
ABOUT THEIR PROCESSES!

It is neither necessary nor good sense to oversell a development like Wash and Wear. It is too good to be killed by telling the consumer where the limits lie; but it is even better consumer relations to state openly and candidly exactly what can justifiably be expected from your process.

A cursory examination of current advertising . . . and this reaches down the line even to hangtags furnished to manufacturers . . . proves that the industry is making an honest and conscientious effort to keep claims within the bounds of fact. If this is backed up at the mill and finishing level with honest tests to substantiate advertising claims, the only possible result will be one of benefit to everyone involved in Wash and Wear . . . for years ahead.

USE ALL EIGHT OF THESE PROMOTIONAL TOOLS TO SELL FASHION-BY-THE-YARD

Is Your Piece Goods Department up-to-the-minute on these Business Producing Ideas?



1. Trim WINDOWS as fashion displays

Do away with the ancient trim of fabrics draped across the background . . . except purely as background. Turn the spotlight, literally and figuratively, on a finished garment made of the fabric you are promoting. Be sure the sign in the window gives all the essential information: the name of the cloth, its price, width, how many yards are needed to make the garment, the pattern number, trimming data . . . and then the total cost.

2. ADS should be Fashion-Informers

In your newspaper advertising talk mainly about specific and important fashions . . . and then show how your fabric fits into the picture. Show a finished garment and, just as in your windows, give all the information needed to help make up the customer's mind.

3. Use FASHION SHOWS to animate your stock

Invite customers to your department, if you don't have an auditorium or restaurant, to see living models wearing fashions made of your fabrics. Again, in connection with each style, give your audience all the necessary information about all the elements needed to copy fashion.

4. Conduct SEWING CLASSES regularly

Set aside a corner of your department . . . rather than take the customers outside . . . where a competent instructress can help women learn to sew their own. Countless women could be good customers for your department if they were put into the hands of a capable teacher. Remember, too, that while they are learning, these women are actually buying materials in your store.

5. Set up a DRESSMAKER Service

Invite all local dressmakers to utilize your store's fashion information. Let them submit lists of their customers, to whom you can send invitations to see the newest fabrics. Stage regular showings of professional dressmakers' work, in the form of contests; show the winning styles in your windows, giving proper credit to the winners. Do all you can to encourage dressmakers not only to buy fabrics directly from you, but to send women into your department.

6. Work with your LOCAL SCHOOLS

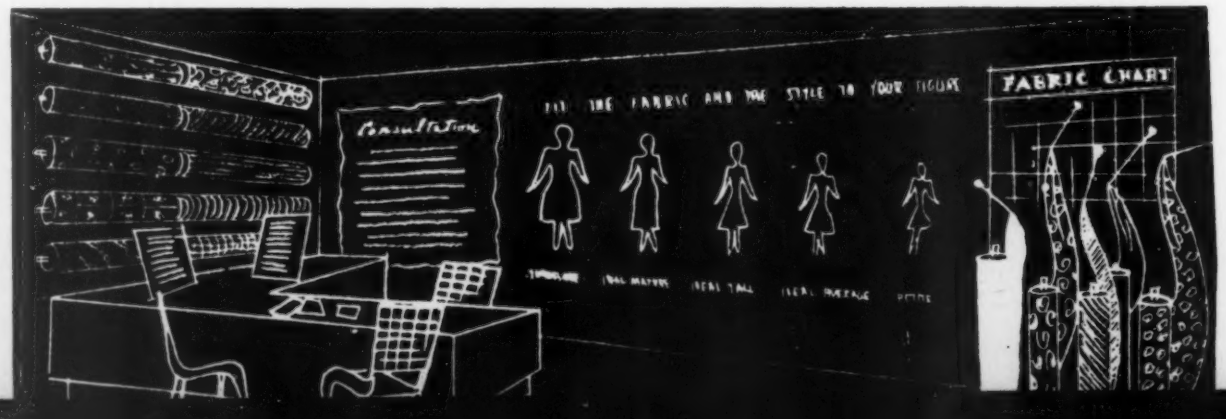
Arrange for your instructress to give lectures at sewing classes. Your fashionist, or your advertising manager, can give talks on fashion trends. Invite students to utilize your facilities for sewing, if they have nowhere else to sew. Stage fashion shows in which students can model their own creations.

7. Use customer lists for MAILERS

In addition to keeping your fabric customers posted when new fabrics arrive, keep their fashion appetite whetted with chatty, newsy little letters telling them about the new fashion trends. Your advertising department, your apparel merchandise office have loads of such information; all you need to do is have it translated into fabric terms. Talk up the new patterns, the new trimmings as well.

8. Tie in with MAGAZINE editorials

More and more editorial space is being devoted by important consumer magazines to sewing-at-home. Where, a decade ago, such information was confined to the pages of the "service magazines," today it is common to turn the pages of Charm, Mademoiselle, Seventeen, McCall's, Vogue and other fashion magazines . . . and find yourself intrigued with what you can sew at home. Study these magazines regularly; write to their editors for advance schedules of sewing articles; tie in your ads, your windows, your departmental displays. Consumer magazines are preconditioning millions of women every month in favor of sewing-at-home; with a little effort, you can clinch the sale in your department.



PIECE GOODS DEPARTMENT MUST BE SET UP RIGHT TO SELL FABRICS AS FASHION

The Bigness with which You Lay Out Your Piece Goods Department Will Tell Your Customers How Important It Should Be to Them

The first contact between your customer and your department will help to decide the sales you will make . . . or lose. There are certain simple but essential things every Piece Goods department should do, to create the right impression at the start. They will help establish your department as a fashion department; they will enable your customers to buy more swiftly without loss of time or patience, they will enable your sellers to work more efficiently.

1. CLASSIFY the department by TYPES

Make it simple for the customer to find exactly what she is seeking. without ambling through the entire department. Unlike most departments in a store, your customer has a fairly fixed idea as to her wants; she is looking for a dress fabric, or a suiting, or a print for her daughter's dress. Segregate the appropriate fabrics, then, by types . . . and then make it obvious through posters and displays. Within the fabric types, regroup by color, all the browns together, the blacks together, and so on. The one exception to this rule is the case wherein a specific color, or type of pattern, is running wild as a mass fashion; it might be greens, one season, or it might be the new British Colonial stripes. Whatever it is . . . group all the fabrics of the particular type, and spotlight them up front with a special display.

2. SPOTLIGHT types with finished fashions

Again, bearing in mind that your customers look on your fabrics as a means to an end . . . show them the end as a stimulant to the means. For every major classification of your fabrics you should have at least one finished garment on a pedestal nearby . . . and more if you have the room to display them. Have the finished garments carefully made from an actual pattern in your own stock, with trimmings from your own stock . . . to show women that they can buy all the necessary ingredients right then and there.

3. DISPLAY CARDS must sell Fashion

Your display cards must tell more than the type of fabric, the width and the price. They must be as challenging, as urging-to-buy as the copy in your newspaper advertisements. They must definitely relate each fabric to a specific and timely fashion in apparel. Talk up your brocade suitings as the fabric for the new heat dinner suit; your Paisley prints as the ones worn at Nassau this season on the beach. Use fashion-talk to sell fabrics.

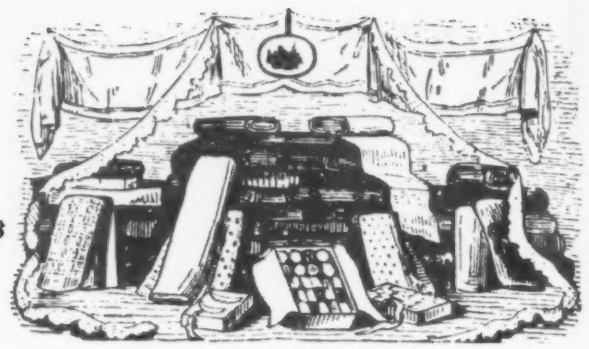
4. Sell the FINISHED Fashion

Over and over again, in every possible manner; in your floor displays, in your salespeople's conversation, on posters and sign cards . . . start by selling the end result. Show women what they can make; what they need in fabric, in trimmings, in patterns to achieve that result . . . and then the total cost. Only the short-sighted fabrics buyer demurs against talking up patterns and trimmings; the alert buyer knows that they help him to make his sale.

(please turn)

TO SELL FASHION-BY-THE-YARD YOU MUST COVER ALL EIGHT OF THESE VITAL POINTS

How does your Piece Goods Department answer the Fundamental Questions posed below? For self evaluation we suggest you check your piece goods department's performance on the following eight points



1. The BUYER must be Fashion-Wise

More important than the ability to set a counting glass on a swatch! more vital than knowing the count and construction, the finish and the feel of a fabric . . . will be the Piece Goods buyer's knowledge of Fashion as a force in selling fabrics. He will have to know apparel trends; color and line and silhouette . . . just as surely as does the dress or sportswear or suit buyer in his store. For the consumer today is buying fabrics with a finished fashion in mind.

2. SELLERS must be Fashion-Wise

They must know the draping and needling qualities of each fabric . . . yes. But of far greater importance, from now on, will be their knowledge of Fashion. They should know, of course, how a fabric will wear and wash or clean; but they must also know which fabrics are strongly attuned to the trends, for what purpose they should be used, in what colors they are best for the consumer. It is up to the buyer to disseminate live fashion information to his sellers.

3. SPACE and LOCATION must be right

We have witnessed the move of Piece Goods departments from choice and spacious locations on the main floor to corner spots on dimly lit upper floors. It is high time this profitable department were given its proper place in the sun of traffic . . . for if it is doing so well in an obscure location, it will do far better when it is located where women can reach its counters with ease. Chain stores learned, years ago, the folly of out-of-the-way locations for the sake of lower rentals; they discovered that by moving into the most heavily travelled areas, the high dollar rent became a low percentage rent through increased sales. We believe department stores should profit by this experience.

4. Merchandise SOURCES must be right

As the consumer dollar shrinks, it will be vital that the Piece Goods buyer analyze his sources of supply and work only with those who can contribute directly and materially to the selling of his stock. He should of course confine his purchases to those houses of unimpeachable quality. But he must work, within that group, with those fabric firms which not only attune their styling to fashion trends but make available to him the selling and promotional material he requires. Further, he should wherever possible work with firms whose fabrics have built consumer acceptance; whose brand names hurdle the consumer question of who-made-it.

5. The PATTERN tie-up must be right

The pattern department must be carefully merchandised to coincide with what the Piece Goods department is doing. Not only must there be the right assortment of patterns by seasonal types . . . including sportswear and novelties . . . but you should include patterns from several different companies to give your customers the broadest assortment in keeping with practicality.

6. The TRIMMING department must be complete

For want of a button many a piece goods sale has been lost. Don't let it happen in your department. Your trimming department should work with manufacturers whose lines each season are styled in close coordination with basic fashion trends. If the trend is toward jewel type buttons . . . you should have them to help your customer keep in step with fashion. Laces, tapes, slide fasteners . . . all the little things which add up to a garment . . . must be in the right styles, the right colors, the right assortment. Above all, they must be easily accessible to the Piece Goods department.

7. STOCK CONTROL must be rifle-accurate

Because Piece Goods is fashion goods, your inventory must be accurately laid out and controlled as any dress department's. Your buyer must know from day to day which colors are selling best, so he can reorder while his customers are still interested enough to buy. He must watch the slow sellers, in weave as well as color . . . because, just as in apparel, fashion fabrics carried over from season to season take a murderous markdown to dispose of them.

8. PROMOTION must sell Fashion-By-The-Yard

The days of announcement in fabric selling are dying. This is the time . . . tomorrow will be the time . . . when fabrics must be promoted as a vital and living part of the fashion picture. Remember that your customer, when she buys fabrics, does so with a finished ideal in mind . . . you must promote to her that way.

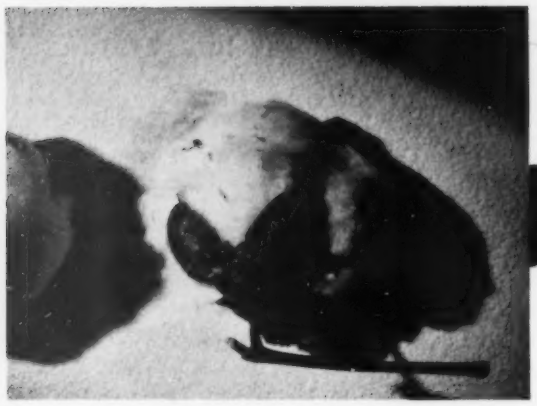
COTRON

the wedding

of

COTTON and AVISCO RAYON

This is the Story of Cotron and how
Rayon makes possible a whole new family of
Fabrics which Blend the Best Characteristics
of Cotton with those of Rayon



. . . Cotton

Rayon . . .

the story of COTRON

Newest tribute to the American Bent for Blending,
Cotron adds the desirable qualities of Rayon to those of Cotton to produce a
New Family of Fabrics with Durability and the Look of Luxury

THE TEACHERS OF genetics make much of the fact that no marriage between two weakly people can result in a healthy child. Conversely, when both parents have strength of body and mind, their progeny must invariably reflect not only a combination of both parents' virtues, but through some mysterious catalytic process still more strength is added.

The happy wedding between cotton . . . most important among Nature's own fibers . . . and rayon (which outsells any other manmade fiber by at least eight-to-one) is an interesting case in point. The use of cotton as a blended fiber with others is not new; nor, on the other hand, is rayon entirely a stranger to other fibers in blends. But the Cotron blend of cotton with Avisco rayon *is* new; it is a marriage which may have been made in heaven, but it produces a number of very down-to-earth benefits.

To begin with, it is necessary to know what Cotron means. It is a name coined and trademarked to describe the entire range of fabrics woven of blends, or combinations, of cotton and Avisco rayon. It is *not* a new type of fiber; it is a new way of fiber; rather, it is a new way of using the oldest of Nature's and the oldest of Man's fibers.

Why Cotron Was Developed

Several natural factors have impeded both the accessibility to and the quality of fine, long-staple cotton. As you undoubtedly are aware, at the present moment there is a surging battle between the growers of cotton and our government, on the question of price supports: the government is trying to obtain agreement from the farmers that they will devote more acreage to long-staple cotton, in order to alleviate the mounting shortage; on the other hand, the farmer most naturally prefers to use his land for low-grade cotton, because the yield-per-acre (and therefore the size of his government checks) is greater and faster in coming to him.

So, the weavers and users of better-grade cotton cloths are beset with a recurring shortage of good-grade cotton, while the resultant price-rise is slowly putting fine cotton out of the reach of the masses on whom they must depend for volume.

Contributing Factors

The other natural factor which has mitigated against the producers of fine cotton cloths is the matter of over-mechanization. Starting with the use of mechanical cotton-picking machines as a substitute for hand-picking, and all the way down the line of processing, even long-staple cotton is definitely weakened today. No machine is as delicate in picking the cotton as were human hands; nor can a machine be expected to pass over stunted or damaged, sun-ripe or over-ripe bolls. At later stages the pressures and strains of machining have slowly but surely mounted to the point where a good deal of the finished spun cotton, even though it may have originated from a fine long-staple fiber, does not have the tensile strength of its counterpart of twenty years ago.

COTTON ALONE . . .

RAYON AND COTTON WED . . .

Through a combination of the best qualities of two great fibers, Cotron fabrics achieve performance and appeal which make them an important addition to the textile field.

Why Rayon Is Added

Cotton contributes certain marked advantages to the Cotron marriage blend. And so does rayon. By careful pre-engineering, with sound end uses in mind, the benefits of each are not added, but in a sense *multiplied* when they are used together. Take, for example, the matter of fabricating a cloth which will take a better Wash and Wear finish: cotton alone can do just so much, but when the strengthening rayon in the right proportion is blended in the right construction, the resultant cloth takes to a good resin finish like the proverbial duck takes to water. The finish adheres better, and the abrasive factor is greater than in an all-cotton or all-rayon cloth.

This, in turn, explains why garments made of Cotron come through laundering looking better and lasting longer; why, in short, the trend toward more Wash and Wear merchandise suggests Cotron fabrics.

Another advantage of the addition of Avisco spun rayon is one with which all textile technicians are familiar; because rayon has a sleeker surface than natural fibers, it takes dyes in a clearer and cleaner manner. Naturally, by carefully planning the method of blending with cotton, the woven grey goods will take colors brighter and clearer than cotton alone. The result is a brilliance and a luster which the consumer finds attractive.

But still another advantage comes from Cotron: *lower raw material cost.* Rayon costs less per pound than does cotton and when the Cotron blend contains at least 25% Avisco content the reduced cost factor becomes significant. It permits better finishing and printing, gives the mill a better profit margin, and allows for more merchandising and promotional effort.

So we have these advantages:

a. A healthy addition to the present nature-limited supply of long-staple cotton to make fine goods.

b. A substantial saving in the cost of raw materials.

c. A better base for the increasingly important Wash and Wear type of fabric.

In addition, there is the added *emotional* appeal which rayon provides: the silky, luxurious hand; better drapability for subtle figure moulding. These are characteristics which could previously be supplied only in the most expensive cotton cloth woven out of the finest fiber and, again, expensively finished; but the removal of so much long-staple cotton from the market is threatening to make the cost prohibitively high.

Where Will Cotron Find Its Home?

Having seen and felt a number of experimental examples of Cotron, and with full awareness of what the converter, the manufacturer, the retailer *and the consumer* are presently

(please turn)

Questions and Answers on the subject of COTRON

(1) **What is Cotron?** *Cotron is the trademark of American Viscose Corporation for woven and knitted fabrics of cotton and Avisco rayon that meet performance standards.*

(2) **What are the advantages of Cotron Fabrics?** *The marriage of cotton and Avisco rayon gives qualities that could not be found in either fiber alone. Cotton contributes strength, launderability and durability. Avisco rayon contributes luster, clarity of color, fabric evenness, luxury of hand and drape. Wash and Wear finishes are readily applied to Cotron fabrics to afford greater strength after repeated launderings. The best features of each fiber have been combined in Cotron fabrics to give the consumer maximum satisfaction.*

(3) **What fabrics qualify as Cotron Fabrics?** *Fabrics which meet certain high performance standards and contain Avisco rayon qualify. Claims for fabric performance are carefully checked by American Viscose Corporation.*

Already on the threshold to a big market in the U.S.A., the blend of cotton-with-rayon has really taken hold sizably in France. Under its laws the use of as much as 15% rayon is permissible without tagging the fabric content as other than cotton; the attributes which rayon contributes are being avidly sought after by the consumer.

A soft hand is another characteristic of COTRON blends, as well as depth of coloring. A Sharon print.

(continued)

seeking, it is the opinion of many merchandisers that there is already a strong and waiting market for Cotron in almost every area in which the soft goods industries operate:

Apparel and furnishings for men
Apparel and furnishings for women
Apparel and furnishings for boys and girls
. . . and a great many articles in home furnishings

The enumeration of the individual items which can be enhanced in both appearance and sales by the use of Cotron is limited mainly by the imaginative powers of the individual manufacturer. He must be able to visualize what construction is best suited to the specific end use; and then convey his thinking to the technicians entrusted with the actual mechanics.

How Cotron Will Be Promoted

Since the name Cotron is a broad descriptive nomenclature for *all* the varying types of cotton-and-Avisco rayon fabrics; since the end uses fall into literally hundreds of fields, Avisco is promoting Cotron as the basic *idea* to both the consumer and the trade. Labelling, of course, will come within the limits set up by the Federal Trade Commission.

Cotron offers the textile and soft goods industries a new and fresh approach to secure more sales and more profits. The facilities of the American Viscose Corporation, creators of Cotron, are available to weavers, finishers, converters, manufacturers and retailers who are alert to new ideas . . . and ingenious enough to turn them to a new end.

There is much of value in Cotron for those who are beset by the problems which led to the development of this wonderful new textile construction; a number of major mills have already found that Cotron is giving their volume a commendable boost . . . and others are on the threshold of bringing forth their own versions.

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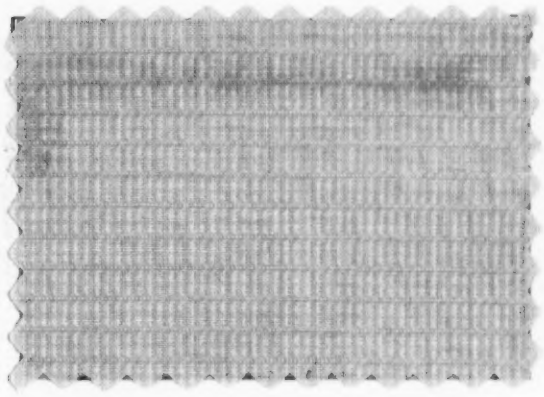
BEATING THE DRUM . . . These are a few of the American Viscose ads which will help spark the corporation's merchandising program for Cotron fabrics.

Feel the soft hand; this fabric of cotton and Avisco rayon makes possible the subtle coloring of the Sharon fabric.

In rich colors, this Lo wenstein carded print cloth, with appearance of a combed fabric, is of cotton and Avisco rayon.

By blending cotton with Avisco rayon, Crompton-Richmond produces a new lustrous face and softer hand in corduroy.



A basketweave COTRON blended embossed fabric by M. Lo wenstein & Sons— rayon content makes embossing more permanent.

Colors usually attainable only in pure silk mark this unusual COTRON cotton and Avisco rayon print by Sharon.

Oxford-woven ground overprinted in brilliant colors, a fabric of cotton and Avisco rayon by M. Lo wenstein & Sons.

As interpreted by leading mills . . .
the New COTRON Development
is an outstanding example of the
American Bent for Blending

The Wise Owl Sees 5 Reasons for Cotron's Success . . .

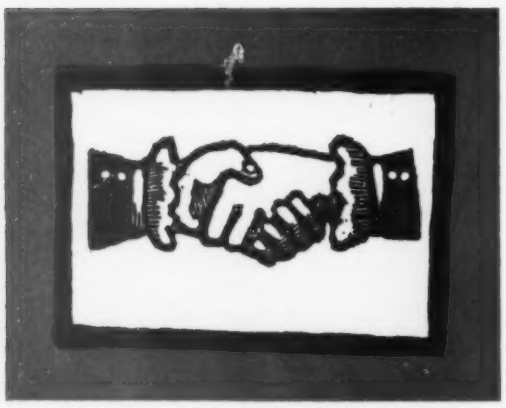
1. A BETTER HAND, because Rayon adds a silky, luxurious hand to the friendliness of Cotton.

2. MORE EYE APPEAL because the Rayon takes dyes and colorings more clearly, and with more luster.

3. GREATER ECONOMY because Rayon costs less than Cotton.

4. BETTER WASH AND WEAR CHARACTERISTICS because the addition of Rayon makes the fabric more receptive to chemical finishes.

5. GREAT STABILITY because the designer can manipulate the qualities of Cotton and Rayon best to express his ideas.



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Take the case of a classic cotton cloth construction: an 80-square. It has solidity, strength and other valuable features. But it also has certain disadvantages; or, to put it another way, the consumer would like 80-squares even better if they had additional characteristics. No matter how well it is printed and finished, after a number of washings an all-cotton fabric is prone to lose its crispness; its colors tend to dim; the tensile strength begins to shrink.

But the new Cotron concept developed by American Viscose, in an 80-square piece of fabric, replaces the negatives with alluring positives. By weaving the fabric with 70% cotton and 30% rayon this is what happens:

— the hand of the goods becomes silkier.

— the addition of the rayon enables the cloth to take bright colors; much brighter than an all-cotton.

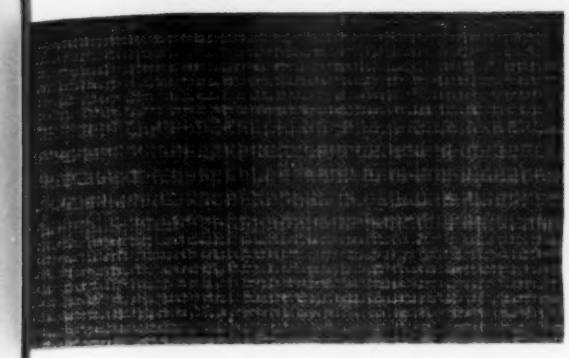
— the tensile strength becomes greater as the fabric is continuously washed.

— the saving in yarn costs can be put into better styling and finishing.

Bent for Blending

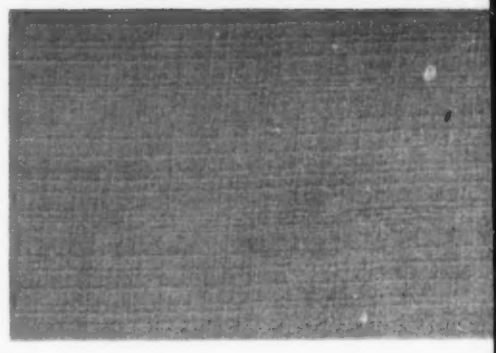
When these advantages are added to the natural appeal of cotton, the result is not only a better fabric, but one with better selling appeals. It is also an enticement to the great number of women who are ever susceptible to the new and the different. Cotron gives the converter, the cutter and the retailer a new lift in selling enthusiasm; it offers a *tangible* basis for more excitement in selling and promotion.

With the necessary tests and development work out of the way, those mills which have been working with American Viscose have already learned that the element of excitement is easily evoked with Cotron; in numerous cases, this was generated among businessmen generally hardened to the barrage of so-called new ideas which are most usually only warmed-over old ideas. In Cotron they were quick to see that more than just a new type of blend, the resultant fabrics, as well as the apparel made of Cotron, were functionally sound as well as emotionally appealing.



Major break-through in Field of Man-Made Fabrics

Avisco XL's great strength enables mills to spin finer yarns and has special significance for those interested in the lightweight worsted-type fabric blends. Arnel, for example, blended with XL rayon, makes an economical combination and admirably meets requirements in this area.



the AVRON PROGRAM is an even further extension:

Using Avisco XL (High Strength) rayon as the genesis for a new family of fabrics, American Viscose discloses a further development in the direction of blends. Under the broad banner of the name Avron, individual fabrics may range from a 100% Avisco XL content to any one of the blend percentages in conjunction with other fibers. Already mills have developed some interesting fabrics for various end uses. In apparel fields, for instance, we find cotton lawns with a filling of XL; broadcloths, poplins, corduroys and fine-woven challis, and even suitings which blend XL with the newer manmade fibers. In the home furnishings fields where fine yarns with a high tensile strength are needed, Avron is expected to become important in drapery and upholstery fabrics.

The Key Is Increased Tensile Strength

Dry, Avisco XL has 40% greater strength than comparable fibers; when wet, XL's superiority over ordinary rayon leaps to 60%. When used for Wash and Wear merchandise, Avron fibers which blend XL with cotton show between 75% and 100% greater tensile strength than 100% cotton fabrics of the same construction. This obviously eliminates the need to beef-up grey goods construction to withstand Wash and Wear finishing.

On the other hand, another advantage of Avron fabrics is in the soft, luxurious hand which is attainable. Even the sheerest fabrics gain surprising strength from the XL fiber, which may again open the door to more use of sheer cloths such as lawns, organdies and voiles.

Performance Will Be Checked Constantly

To qualify to use the Avron label certain standards of performance have been set up; furthermore, actual continuing tests of made-up garments will be made sporadically to ensure proper construction of the end product as well as the fabric. These controls include fabric construction, tensile and tear strength, abrasion resistance, shrinkage, crease resistance and Wash and Wear ratings where applicable. American Viscose is convinced that Avron is a good product; its purpose in the future will be to protect that reputation for the good of its users.

How Avron Meets Market Requirements in Wash-and-Wear Fabrics

American Viscose asked the National Association of Shirt, Pajama and Sport Shirt Manufacturers to delineate their minimum stands for satisfactory performance in a Wash and Wear fabric. This table indicates how far above these minimal standards Avron can extend:

	LAWNS		COMBED BROADCLOTH		CARDED BROADCLOTH	
	Required	Avron	Required	Avron	Required	Avron
Filling Tensile Strength	18 lbs.	34 lbs. (90% Better)	25 lbs.	44 lbs. (75% Better)	25 lbs.	40 lbs. (60% Better)
Filling Tear Strength	350 grams	1000 grams (190% Better)	450 grams	1600 grams (250% Better)	450 grams	1600 grams (250% Better)
Wrinkle Recovery	220°	250° (10% Better)	220°	250° (10% Better)	220°	250° (10% Better)
Wash-Wear Rating	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0	3.0-5.0

SHEER . . . with Stretch

The development of Vyrene Elastic Yarn, with a diameter of 1/150 of an inch, adds life to untouched industries

VYRENE IS RISING in the field of elastic textiles. It will open up new vistas of super-fine and super-soft elastic fabrics. Vyrene is the trademark of U. S. Rubber for the new synthetic elastomer it has created to supplement and extend the range of its Lastex yarn. Now, after several years of development and careful market evaluation, pilot plant production of Vyrene is just beginning to move into retail channels.

There has been an increasing demand in recent years for super-fine elastic yarns for use in sheer elastic fabrics. Because of this demand U. S. Rubber chemists have engaged in extensive search for an elastomer with the physical characteristics of rubber, plus toughness. Vyrene thread is the result of this research in the field of polymer chemistry.

VYCILLE — Rosenstein Bros. bathing suit fabric of cotton and VYRENE in a rose print.

Rose Marie Reid designs a two-piece and one-piece bathing suit in Rosenstein Bros. rose print of cotton and VYRENE.

Good Physical Characteristics

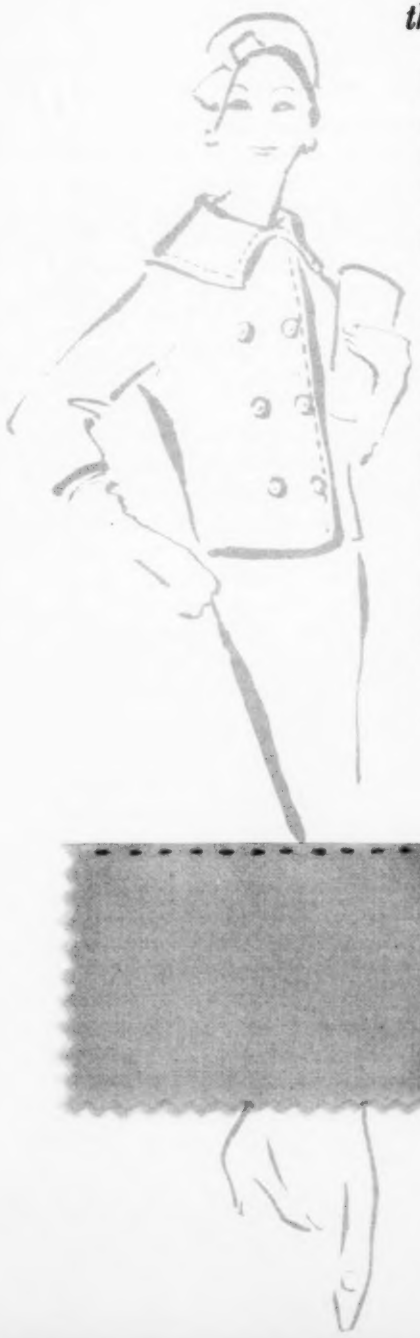
The physical properties of the new elastomer have been carefully designed to fall into the area of normal rubber thread properties. Thread made from this new material has high tensile strength and great resistance to chafing. It remains resistant to light, ozone, and solvents, even in very fine sizes. Other characteristics are good modulus retention, quick memory or stretch return, and good results in standard scouring, finishing and dyeing procedures as well as wear and washing tests.

Vyrene is a complete yarn in itself, with a fine elastic core of elastic mono-filament covered with nylon or other man-made fibers. In comparison with Lastex, which has a large usage in constructions with core sizes around 1/100 inch diameter, Vyrene is made with the elastic element 1/150 of an inch in size. In knitted or woven goods with conventional textile yarns, the extra fineness of Vyrene creates soft and sheer fabrics not heretofore obtainable. These qualities, plus its unusual life, indicate excellent prospects for Vyrene in swim suits, golf jackets, sports wear, corsets, brassieres and other intimate apparel.

During its long market evaluation, U. S. Rubber held back both publicity and advertising to prevent disturbance to existing elastic products in the market. They now point out that, while special production facilities are being built up, volume on Vyrene will be insufficient for needs of interested markets for some time to come.

It Duplicates The Human Hand:

AMF's Machine Uses a Free Needle to Replace the Vanishing Labor Market for Hand-Stitching

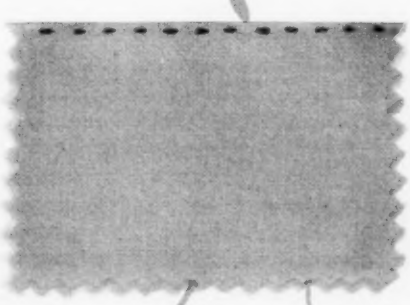


MANUFACTURERS in every industry have long bemoaned the fact that there is a growing shortage of skilled needleworkers. This betokened the day when clothing would have to give up the fine finish of hand-picked lapel stitching; shirt collars would revert to a flat monoplane of fabric without the stitched edge; gloves and sportswear, too, would have to sacrifice this finishing touch which bespoke custom needling.

But the American Machine & Foundry Company solved this situation with a machine which not only duplicates hand-stitching . . . but does it better. Mechanically, the machine passes a "floating" needle through the top layer and returns it by another path . . . at the rate of 400 stitches a minute. The needle is a free, double-pointed device with the eye in the center; it is grasped by an upper needle bar, pushed into the cloth and then pulled through by the lower needle bar, while the thread itself is pulled through by a looper.

Not only does the machine do simulated hand-stitching perfectly (eliminating the heretofore necessary period of training) but it produces an infinite variety of stitching effects . . . which enable the cost-conscious designer to eliminate more expensive forms of decoration. The machine is today in wide use among many manufacturers in the fields mentioned above, as well as others.

Simulated hand-stitching:
the subtle mark of a quality garment.



Reproduction of Leger painting . . . Enrico Gregotti worked directly with the famous painter, Leger, and the result was a Bossi cotton print design, reproducing one of Leger's abstract paintings.

COMMON FACTOR in an UNCOMMON FAMILY:

The famed Bossi Cotton Mills of Italy revolve entirely around Creative Instinct in Two Generations

A HALF HOUR'S DRIVE from the great textile center of Milano in the small Italian towns of Cameri and Arona, sit the Bossi mills. At the top of the Bossi mills sit four men who work in harmonious tandem without rivalry or artistic tantrums: two brothers and their sons who recognize and highly esteem the contribution each member can make to maintaining the extremely high quality standards of Bossi.

These standards come from two basic sources: technology and artistry. It is necessary to know something about each of the Gregottis to realize how they apply both skills, and why their product is so much in demand among the haute couture of Paris, Rome, London . . . and New York. Quinto Gregotti, whose hobby is painting, is thoroughly versed in the mechanics of textile weaving and finishing; when a new weave is under consideration, he knows precisely how it should be made, of what fiber content, and on which equipment.

His brother Luigi, a more-than-competent artist in his own right, has a keen eye for design or coloring; he can suggest slight modifications which make the final difference between sales and closeouts for Bossi customers. And he has a strange avocation: as an aviator in World War I he learned to fly a plane; today he uses his own plane to rescue stranded mountain climbers in the Northern Alps. At the age of 15 he went to Switzerland to study and learn at firsthand the fine art of weaving fine fabrics; he worked in world famous mills, and absorbed much which today stands his company in good stead.

Quinto's son Edoardo has inherited much of the family love for art, even though his particular forte is in production; perhaps more specifically than his associates, he is a true

President Quinto Gregotti, second from left, and his brother v-p Luigi at right; Quinto's son Edoardo at left and Luigi's son Enrico, second from right . . . the team tied together through a community of textile interest as well as family.

On the Italian Riviera, a Bossi cotton

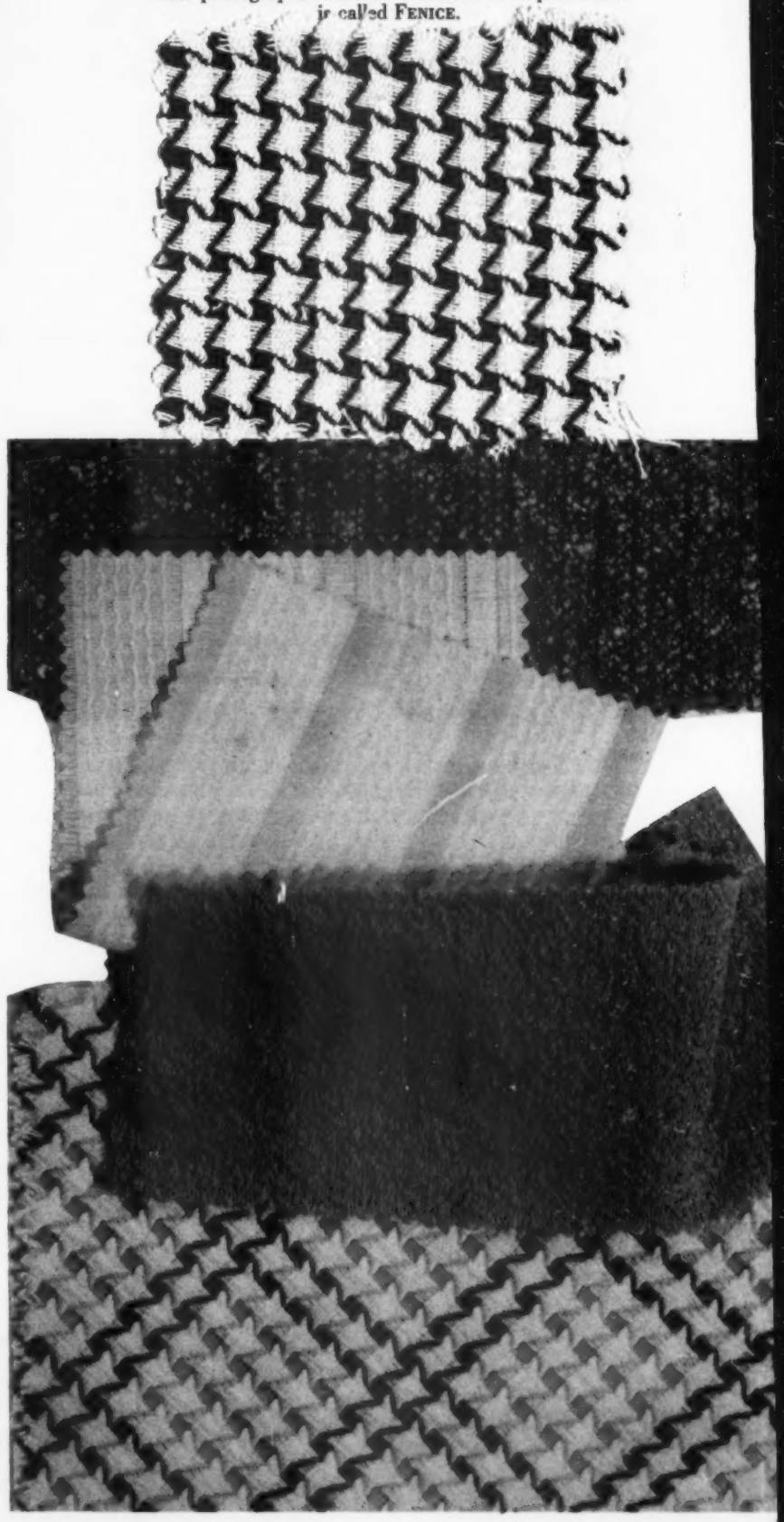
millman. To balance the picture, Luigi's son Enrico has steeped himself in modern merchandising and promotion methods; he studied marketing at Columbia University after his studies in Italy; and he has made numerous trips to visit with customers not only in Italy and all of Europe but in the U. S. A., Venezuela, Australia and other areas . . . to determine the market requirements for each area in terms of design, weave, color and the other elements which help to constitute a line.

Thus one has within one firm four members, each of whom could hold down a responsible position in any major textile firm, banded together and working in complete harmony . . . and each infusing the others with his own creative contributions. The end result, whether it comes from one of Bossi's 250 box looms or in a print, is always eagerly sought by the best manufacturing stylists and designers. And, as is usually true of any fine artistry, Bossi cottons are always admired and emulated by the textile producers of every other country.

A fresher face on an old reliable design such as District Checks, perhaps a new version of blazer stripes . . . the four sit together to pore over and ponder every new idea. The main purpose of the team is to keep devising new ideas, and each member of the family respects the ideas and abilities of the others.

A trip to the Bossi mills outside Milano would be, in our opinion, an inspiring and profitable investment for anyone interested in unusual fabrics and their product uses. Forward-minded executives in particular can find much inspiration in the direction of more easily salable lines for their own companies — because here, in short, is a pure example of *Creative Thinking* . . . the one vast area in which the textile industry can create more profitable business.

Fabrics in the direction of textured cottons and variations of the houndstooth check are well illustrated by these photographs of Bossi cottons. The sample swatch is called FENICE.



NO DUST

Zen-Getsu, a Chinese master of the Tan dynasty, wrote the following advice for his pupils:

When witnessing the good action of another, encourage yourself to follow his example. Hearing of the mistaken action of another, advise yourself not to emulate it.

Even though alone in a dark room, be as if you were facing a noble guest. Express your feelings, but become more expressive than your true nature.

A person may appear like a fool and yet be not one. He may only be guarding his wisdom carefully.

Virtues are the fruit of self-discipline and do not drop from heaven by themselves like rain or snow.

Modesty is the foundation of all virtues. Let your neighbours discover you before you make yourself known to them.

A noble heart never forces itself forward. Its words are as rare gems, seldom displayed and of great value.

To a sincere student, every day is a fortunate day. Time passes but he never lags behind. Neither glory nor shame can move him.

Censure yourself, never another. Do not discuss right and wrong.

Some things, though right, were considered wrong for generations. Since the value of righteousness may be recognized after centuries, there is not need to crave an immediate appreciation.

Live with cause and leave results to the great law of the universe. Pass each day in peaceful contemplation.

PUBLISHING THE SUTRAS

Tetsu-Gen, a devotee of Zen in Japan, decided to publish the Sutras, which at that time were available only in Chinese. The books were to be printed with wood blocks in an edition of seven thousand copies, a tremendous undertaking.

Tetsu-Gen began by travelling and collecting donations for this purpose. A few sympathizers would give him a hundred ryo, but most of the time he received only small coins. He thanked each donor with equal gratitude. After ten years Tetsu-Gen had enough money to begin his task.

It happened that at that time the Uji river overflowed. Famine followed. Tetsu-Gen took the funds he had collected for the books and spent them to save others from starvation. Then he again began his work of collecting.

Several years afterwards an epidemic spread over the country. Tetsu-Gen again gave away what he had collected, to help his people.

For a third time he started his work, and after twenty years his wish was fulfilled. The printing blocks which produced the first edition of Sutras can be seen to-day in the Obaku monastery in Kyoto.

The Japanese tell their children that Tetsu-Gen made three sets of Sutras, and that the first two invisible sets surpass even the last.

TIME TO DIE

Ikkyu, the Zen master, was very clever even as a boy. His teacher had a precious teacup, a rare antique. Ikkyu happened to break this cup and was greatly perplexed. Hearing the footsteps of his teacher, he held the pieces of the cup behind him. When the master appeared, Ikkyu asked, "Why do people have to die?"

"This is natural," explained the older man. "Everything has to die, and has just so long to live."

Ikkyu, producing the shattered cup, added, "It was time for your cup to die."

TEMPER

A Zen student came to Ban-Kei and complained, "Master, I have an ungovernable temper. How can I cure it?"

"You have something very strange," replied Ban-Kei. "Let me see what you have."

"Just now I cannot show it to you," replied the other.

"When can you show it to me?" asked Ban-Kei.

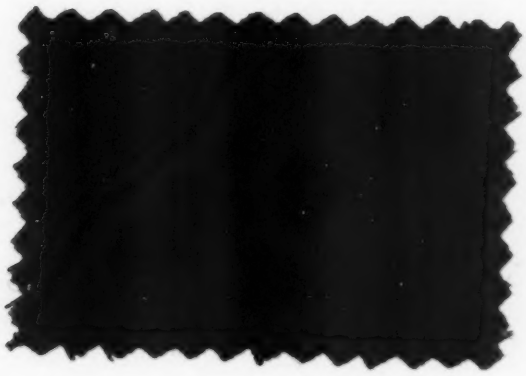
"It arises unexpectedly," replied the student.

"Then," concluded Ban-Kei, "it must not be your own true nature. If it were, you could show it to me at any time. When you were born you did not have it, and your parents did not give it to you. Think that over."

the story of Shamokin's

Clan Tartans

Prepared by Shamokin Woolen Mills in order to supply accurate and authentic information on this important fashion subject.



ANCIENT STEWART ROYAL — MINIATURE

ANCIENT HUNTING MACRAE — MINIATURE

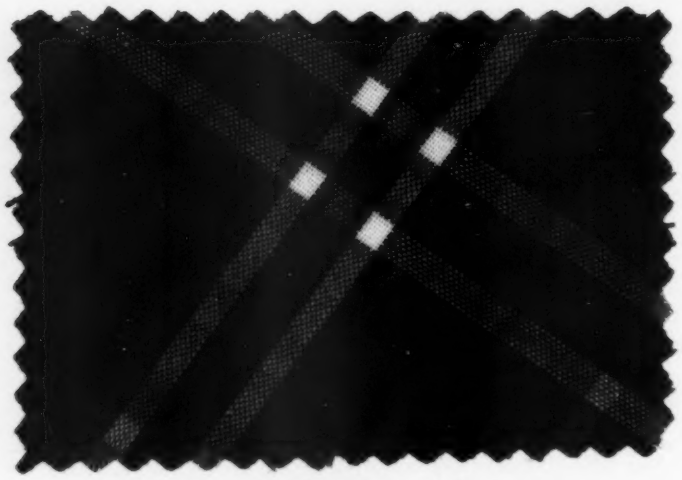
IT CAN BE SAFELY ASSUMED THAT A GROUP OF TEXTILE DESIGNS WHICH HAS EXCITED CONSUMER IMAGINATION and spurred his buying for countless centuries must hold a potent emotional force within its colors and patterns. Else, how does one account for the fact that for as long as man remembers, one of his favorite textile design groups has been the Clan Tartan of the Gaelic lands? Today in the Twentieth Century, Clan Tartans have an unshakable hold not only on the emotions of Scottish people and their descendants, but on well-dressed men, women and children everywhere. Each year, American stores sell more merchandise in Clan Tartan patterns alone than all of Scotland itself consumed. If one studies the progress and development of Clan Tartans it is obvious that, even centuries ago, there was recognition that these patterns must be *modified* for different types of apparel; the Stewart group, as an instance, contains one Tartan for dress, another for hunting, another for war, and so on. The basic *motif* remains the same throughout; but colorings and unit-sizes do vary. Similarly, it makes good business sense to modify current Clan Tartan designs to fit the need. In the American apparel field, obviously, design-proportion is a vital factor; man and woman can understandably be attracted to, say, the Dress Stewart *as a design* . . . and still shy away from its boldness in a garment which properly calls for a less obtrusive pattern.

Therefore, two components must be carefully constructed into any modification of the original Clan Tartans: first, the essential authentic flavor must be retained in colorings and format and, second, proportions must be scaled to remain not only in keeping with the original but in keeping with the objective end-use of the fabric *as the consumer sees it.*

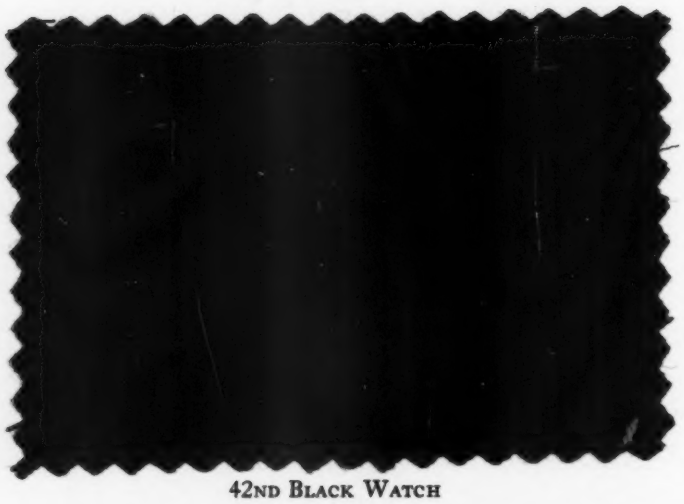
Admittedly, the new Shamokin Clan Tartans, whether Regular, Ancient, or Miniature, meet the foregoing

you can depend on SHAMOKIN for CLAN TARTANS

Clan Tartans by SHAMOKIN



MACPHERSON



42ND BLACK WATCH

PRINCESS MARY

(continued)

requirements and represent a high level of design achievement. All three groups retain the appeal of the basic Clan Tartans; for much care was put not only into the designs but into the selection of yarns, the weaving of the cloth and especially into the choice and application of dyestuffs which would bring forth the drama and charm of the original colorings. Functionally, the adroit redesigning and rescaling of the basic elements have resulted in a range of cloths which vastly widens the selling horizon in numerous types of apparel. This aspect of the designer's chore was considered with specific volume-selling types of garments in view.

Thus, while it is to Scotland (and to unknown lands before) that modern industry owes thanks for the Clan Tartans, it is to Shamokin's designers and mill craftsmen that today's manufacturers and retailers can tip their hat for widening the field in which they can sell even more merchandise with Shamokin's Three New Groups of Clan Tartans. In the pages we illustrate, in picture and swatch, some of the many charming new designs now available at Shamokin. Arrange to see them as soon as possible.

WOVEN OF SHAMOKIN 100% WOOL

by

Clan Tartans
Ancient Clan Tartans
Miniature Clan Tartans

ANCIENT STEWART

ANCIENT MACDONALD

MCQUEEN JR.

HOW THE SOFT TONES AND FASHIONABLY MUTED COLORINGS OF ANCIENT TARTANS WERE ORIGINATED

It is interesting to trace the source of the dyes which were used for coloring the early Scottish Tartans. All of the colors were native to the country. The famous Tartan green was secured from gorse bark and brown knapweed, while the equally famous red came from white crotal (lichen that grows on rocks). Bracken and heather were used for yellow, and bilberries (or blaeberries), alum and moss produced blue. Black came from the bark of the alder tree, wild cress resulted in violet, and dulse or seaweed was used for brown.

WE PRIDE OURSELVES ON THE QUALITY AND AUTHENTICITY OF OUR TARTAN COLORINGS

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for *LADS* — We are now working with the leading men's and boys' manufacturers. Contact us if you sell to this important segment of the Clan Tartan market.

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for the *WEE ONES* — No bonnier cloth than Shamokin's lively rich-looking Clan Tartan will you find if you wish to appeal to this great and growing market.

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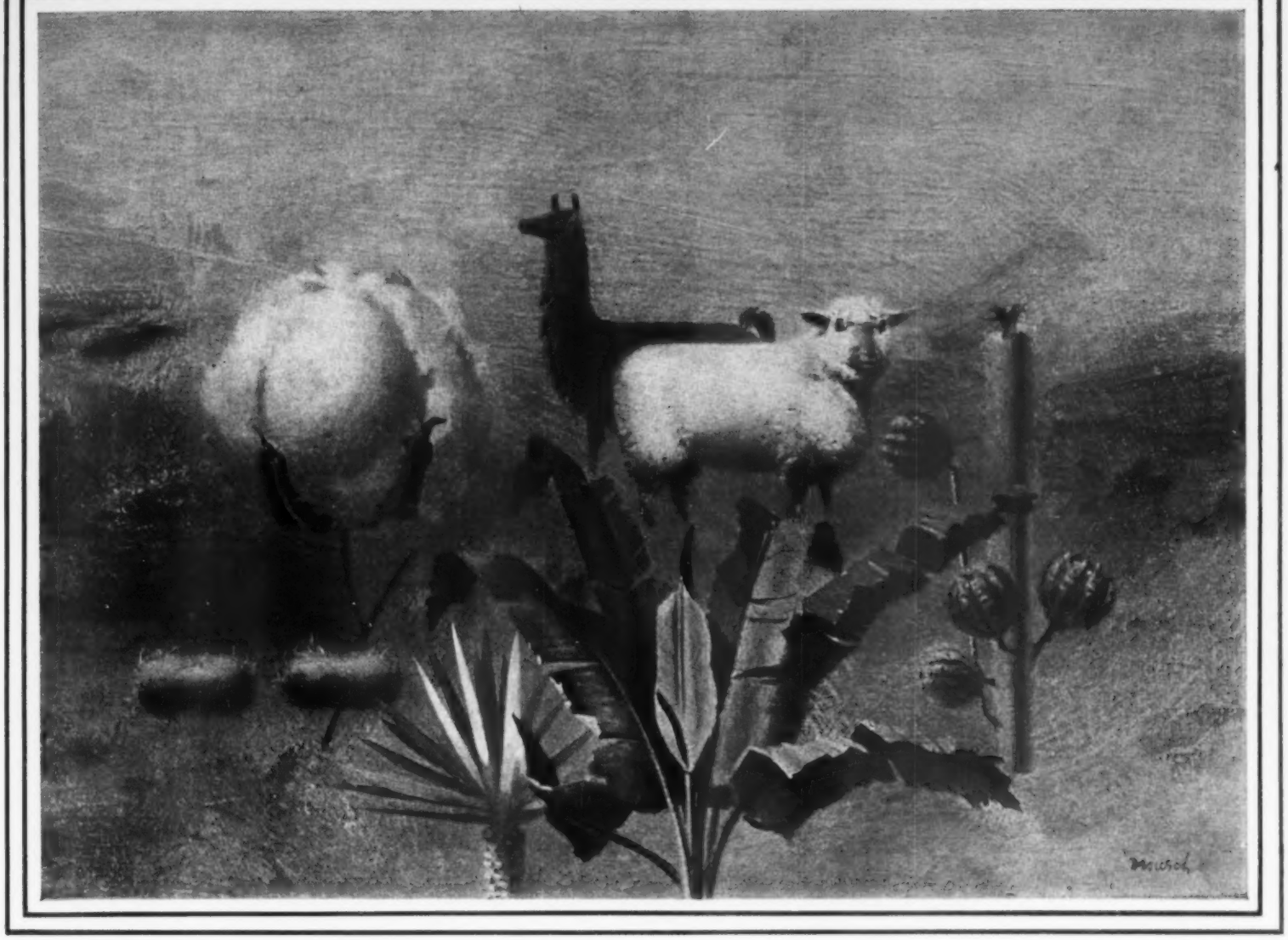

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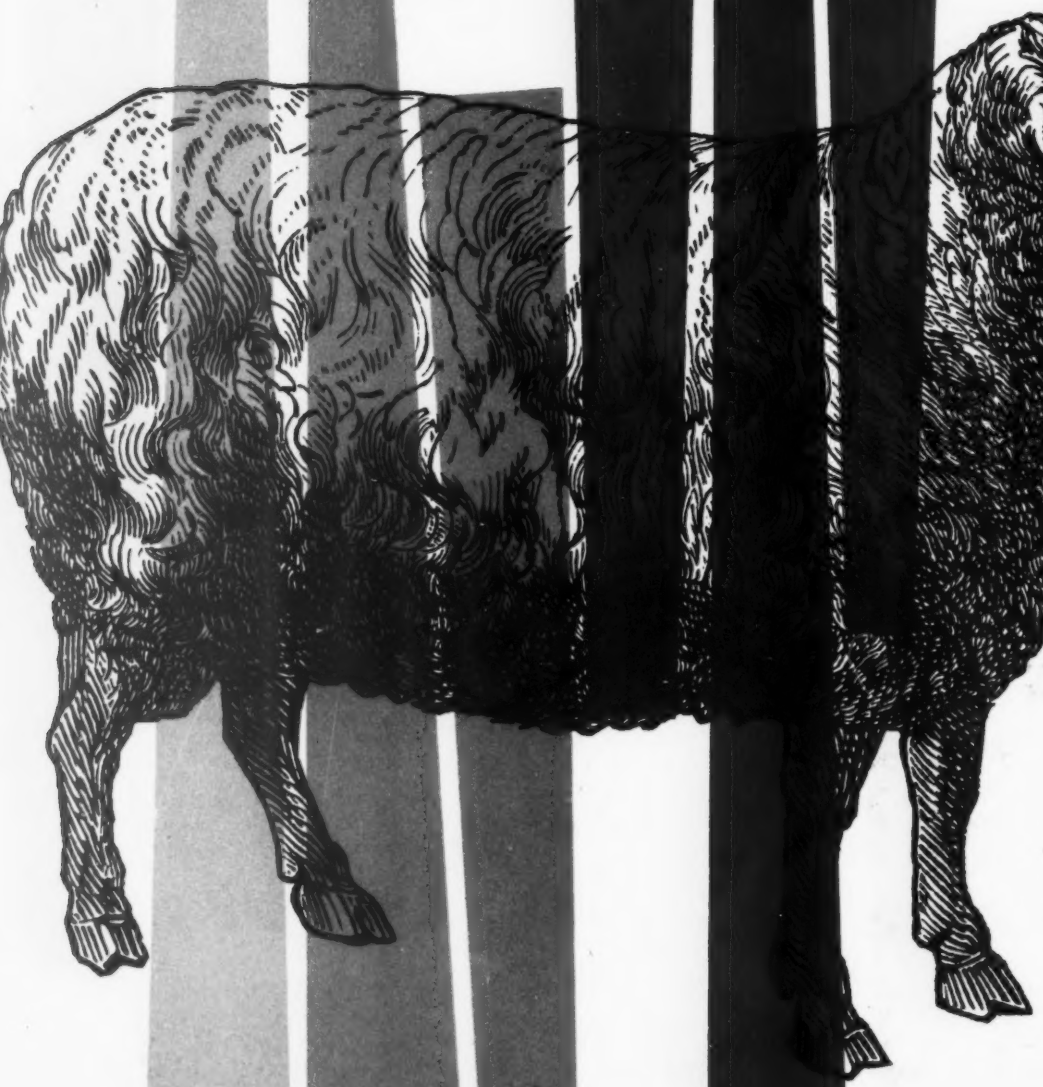

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